



ashm

Australasian HIV/AIDS Conference 2010

22nd Annual Conference of the Australasian Society for HIV Medicine
Sydney, 20-22 October 2010

Wednesday 20 - Friday 22 October 2010
Sydney Convention and Exhibition Centre, Darling Harbour, Sydney



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ENVIRONMENT POLICY

- ASHM Conference & Events Division implements a waste-reduction policy that addresses – Reduce, Reuse, Recycle. This is done before, during and after each conference ASHM Conference & Events Division reduces the number of printed materials by using electronic communication means wherever possible, including the website, email, online registration and abstract submission.
- ASHM Conference & Events Division monitors final delegate numbers for an accurate forecast of catering requirements in order to avoid waste.
- ASHM Conference & Events Division aims to research and prioritise purchasing items and equipment that support the use of recycled materials or can be recycled after use.
- ASHM Conference & Events Division will aim to ensure that recycling bins are available onsite at all events.
- ASHM Conference & Events Division will endeavour to minimise travel through the use of teleconferences instead of face-to-face meetings and holding meetings only when necessary.
- ASHM Conference & Events Division encourages all conference stakeholders to consider the environment by suggesting the following: reduction in printing requirements; recycling conference materials; and reusing conference merchandise.





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WELCOME LETTER

Dear ASHM Members, friends and colleagues,

It is our great pleasure to welcome delegates to Sydney, New South Wales, Australia for the Australasian HIV/AIDS Conference 2010 (22nd Annual Conference of the Australasian Society for HIV Medicine) to be held from Wednesday 20 to Friday 22 October 2010.

The key objectives of the annual Australasian HIV/AIDS Conferences are to promote the strategic objectives of ASHM in Australia and the Asia and Pacific regions with priority to fostering:

- Excellence in research and clinical care for HIV and related conditions
- Professional development through participation of new and early career physicians, scientists and allied health
- Development and assessment of initiatives and protocols for the management of HIV and related conditions
- Dialogue between disciplines (clinical, social sciences, epidemiology and community) and across different locations
- Dialogue and collaboration between regional and Australasian researchers, community organisations, professional organisations and other institutions

This year the conference will hold an event on the evening of Thursday 21 October. This will combine a stimulating debate with excellent food and wine, taking place in the stunning setting of Doltone House. Keynote speakers will take part in this important debate on 'TEST and TREAT Debate – evaluable, applicable and relevant in our region or just plain crazy?'. The evening will conclude with an opportunity to network over drinks and canapés.

The conference brings together the range of disciplines involved in HIV and hepatitis management including: basic science, clinical medicine, community programs, education, epidemiology, Indigenous health, international and regional issues, nursing and allied health, policy, primary care, public health and prevention, and social research.

The Australasian HIV/AIDS Conference 2010 is run back-to-back with the Australasian Sexual Health Conference with one full day of overlap on Wednesday 20 October.

We are sure you will gain a lot from this conference and hope that you take the opportunity to explore Sydney, a city with a vibrant spirit and warm, welcoming Aussie heart.

Levinia Crooks, Chief Executive Officer

Australasian Society for HIV Medicine

NATIONAL PROGRAM COMMITTEE

Conference Convenor: Sean Emery

National Centre in HIV Epidemiology and Clinical Research (NCHECR)

Mark Bloch

Holdsworth House Medical Practice

Graham Brown

Curtin University

Peter Canavan

National Association of People Living With HIV/AIDS (NAPWA)

Tony Cunningham

Australian Centre for HIV and Hepatitis Virology Research

Jeanne Ellard

National Centre in HIV Social Research (NCHSR)

Jeffrey Grierson

Australian Research Centre in Sex, Health and Society (ARCSHS)

Andrew Grulich

National Centre in HIV Epidemiology and Clinical Research (NCHECR)

Richard Hillman

STI Research Centre, Westmead Hospital

Geoff Honnor

New South Wales Department of Health

Tony Kelleher

St Vincents Hospital

David McGuigan

Australasian Society for HIV Medicine

Darryl O'Donnell

New South Wales Department of Health

Nicholas Parkhill

ACON

Peter Patterson

Armidale Community Health Centre

Edward Reis

Australasian Society for HIV Medicine

Mark Thomas

Adult Infectious Diseases Unit, Auckland Hospital

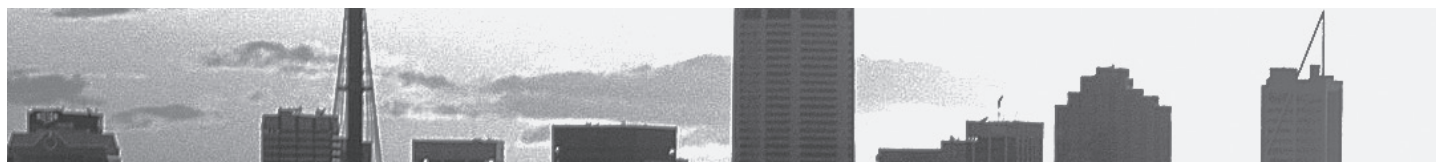
Stuart Turville

Westmead Millennium Institute

Heather Worth

Department of Public Health and Community Medicine, UNSW

**Levinia Crooks, Nadine Giatras,
Nicola Tatham, Nicole Robertson**
Australasian Society for HIV Medicine



REVIEWERS

First Name	Last Name	Organisation
Philippe	Adam	National Centre in HIV Social Research
Janaki	Amin	National Centre in HIV Epidemiology & Clinical Research
Holly	Aruwafu	PNG National Research Institute
Clive	Aspin	Bullana, Poche Centre for Indigenous Health, Uni Sydney
Lisa	Bastian	Government of Western Australia Department of Health
Colin	Batrouney	Victorian AIDS Council/Gay Men's Health Centre
Mark	Bebbington	HIV Consortium
Tim	Blackmore	Wellington Hospital
Karen	Blyth	Victorian HIV Consultancy
Marcus	Bogie	AIDS Action Council of the ACT
Scott	Bowden	Victorian Infectious Diseases Reference Laboratory
Mark	Boyd	National Centre in HIV Epidemiology & Clinical Research
Catriona	Bradshaw	The Alfred Hospital, Melbourne Sexual Health Centre
Kim	Brooklyn	Western Australia AIDS Council
Graham	Brown	Curtin University
Joanne	Bryant	National Centre in HIV Social Research
Leanne	Burton	NSW STI Programs Unit
Peter	Canavan	National Association of People Living with HIV/AIDS
Andrew	Carr	St Vincent's Hospital
Robert	Center	University of Melbourne
Barry	Combs	Department of Health
Denise	Cummins	SSWAHS Community Health Nurses (Redfern)
Elizabeth	Dax	
Robert	De Rose	University of Melbourne
John	De Wit	National Centre in HIV Social Research
Shane	Dinnison	The AIDS Council of South Australia
Kate	Dolan	National Drug and Alcohol Research Centre (NDARC)
Simon	Donohoe	Australian Federation of AIDS Organisations
Greg	Dore	National Centre in HIV Epidemiology & Clinical Research
Heidi	Drummer	Macfarlane Burnet Institute
John	Dyer	Fremantle Hospital
Barry	Edwards	New South Wales STI Programs Unit
Jeanne	Ellard	National Centre in HIV Social Research
Jullian	Elliott	Alfred Hospital
Sean	Emery	National Centre in HIV Epidemiology & Clinical Research
Richard	Eves	Australian National University
Sonia	Fernandez	University of Western Australia
Rosemary	Ffrench	Burnet Institute



Suzanne	Fraser	National Centre in HIV Social Research
Martyn	French	Royal Perth Hospital
Paul	Goldwater	SA Pathology at the Women's and Children's Hospital
Paul	Gorry	Melbourne Sexual Health Centre
Carla	Gorton	Cairns Sexual Health Service
Jeffrey	Grierson	Australian Research Centre in Sex, Health & Society
Abi	Groves	Australian Federation of AIDS Organisations
Andrew	Grulich	National Centre in HIV Epidemiology & Clinical Research
Philip	Habel	Interchange General Practice
Bridget	Haire	University of Sydney
Klara	Henderson	Policy Cures
Belinda	Herring	The University of Sydney
Martin	Holt	National Centre in HIV Social Research
Geoff	Honnor	New South Wales Department of Health
Jennifer	Hoy	The Alfred Hospital
Mili	Kaitaini	University of the South Pacific
Wilfred	Kaleva	PNG National AIDS Commission
Phillip	Keen	Australian Federation of AIDS Organisations
Tony	Kelleher	St Vincent's Centre for Applied Medical Research
Angela	Kelly	PNG Institute for Medical Research
Mark	Kelly	AIDS Medical Unit
Mike	Kennedy	Victorian AIDS Council/Gay Men's Health Centre - VAC/GMHC
Stephen	Kent	University of Melbourne
Alison	Kesson	The Childrens Hospital
Vickie	Knight	Sydney Sexual Health Centre
Henrike	Korner	National Centre in HIV Social Research
Sue	Laing	Communicable Disease Control Directorate, Department of Health WA
Rob	Lake	Positive Life NSW
Patricia	Langdon	Western Australia AIDS Council
Matthew	Law	National Centre in HIV Epidemiology & Clinical Research
Katherine	Lepani	Australian National University
Sharon	Lewin	Monash University & The Alfred Hospital
Samantha	Libertino	Infectious Diseases Department, Fremantle Hospital
Michaela	Lucas	Royal Perth Hospital Department of Immunology
Vicki	Luker	Australian National University
Chris	Lyttleton	Macquarie University
Johnson	Mak	Burnet Institute
Simon	Mallal	Institute for Immunology and Infectious Diseases, Murdoch University
Lewis	Marshall	Fremantle Hospital
Paul	Martin	Queensland Association for Healthy Communities
Karen	McMillan	

REVIEWERS



REVIEWERS

Justin	McNab	Menzies Institute
Dale	McPhee	National Serology Reference Laboratory
John	Mina	Royal Perth Hospital & Murdoch University
Adrian	Mindel	The University of Sydney, Sexually Transmitted Infections Research Centre
Julie	Mooney-Somers	National Centre in HIV Epidemiology & Clinical Research
Dean	Murphy	Australian Federation of AIDS Organisation
Christy	Newman	National Centre in HIV Social Research
Duc	Nguyen	Australasian Society for HIV Medicine
Louise	Owen	The Centre Clinic, Victorian AIDS Council
Cheryn	Palmer	Princess Alexandra Sexual Health
Nicolas	Parkhill	ACON
Sarah	Pett	National Centre in HIV Epidemiology & Clinical Research
Elizabeth	Phillips	Murdoch University
Alan	Pithie	Christchurch Hospital - Infectious Diseases Department
Jeffrey	Post	Prince of Wales Hospital
Andy	Poumbourios	McFarlane Burnet Institute
Garrett	Prestage	National Centre in HIV Epidemiology & Clinical Research
Patricia	Price	University of Western Australia
Rebekah	Puls	National Centre in HIV Epidemiology & Clinical Research
Damian	Purcell	University of Melbourne
John	Quin	Liverpool Hospital
Charani	Ranasinghe	The John Curtin School of Medical Research
Nigel	Raymond	Capital & Coast District Health Board
Vanessa	Read	Department of Corrective Services
Tim	Read	Melbourne Sexual Health Centre
Kate	Reakes	Heterosexual HIV/AIDS Service
Edward	Reis	Australasian Society for HIV Medicine
Graham	Roberts	Fiji National University
Anne	Robertson	MidCentral Health
Darren	Russell	Cairns Sexual Health Service
Peter	Saxton	New Zealand AIDS Foundation
Nabila	Seddiki	
David	Shaw	Royal Adelaide Hospital
Miranda	Shaw	Sydney South West Area Health Service
Sean	Slavin	National Association of People Living with HIV/AIDS
Catherine	Spooner	University of New South Wales
Alan	Street	Royal Melbourne Hospital
Kazuo	Suzuki	St Vincent's Centre for Applied Medical Research
Gilda	Tachedjian	Burnet Institute
Mark	Thomas	Auckland City Hospital
Carla	Treloar	National Centre in HIV Social Research





Kathy	Triffitt	Positive Life NSW
Stuart	Turville	Westmead Millennium Institute
Andrew	Vallely	The National Centre in HIV Epidemiology & Clinical Research
Jo	Watson	National Association of People Living with HIV/AIDS
Ian	Woolley	Monash Medical Centre
Heather	Worth	University of New South Wales
Lynne	Wray	Sydney Sexual Health Centre
Rudyard	Yap	Palmerston North Hospital
Iryna	Zablotska	National Centre in HIV Epidemiology & Clinical Research
John	Zaunders	St Vincent's Centre for Applied Medical Research, St Vincent's Hospital
John	Ziegler	Sydney Children's Hospital

REVIEWERS



You are invited to attend a Gilead sponsored Satellite Symposium, which is part of the Australasian HIV/AIDS Conference 2010.



A new era

— evidence and choice —

guidelines: what are they good for?

Date: Thursday October 21, 2010

Time: 7 am - 8:30 am (breakfast included)

Location: Bayside Gallery B, Sydney Convention and Exhibition Centre, Sydney, NSW

Chair:

Prof. Andrew Carr - St Vincent's Hospital, Sydney, Australia

Agenda:

What was the Panel thinking? Why certain ART regimens are recommended as preferred

Prof. David Cooper, AO - NCHECR, Sydney, Australia

Finding the right fit: alternatives to the currently preferred first-line regimens

Dr Calvin Cohen - Harvard Vanguard Medical Associates and Community Research Initiative of New England in Boston, Massachusetts, USA

What are we actually doing? Adherence to when to start and what to start with, ART guidelines

Dr Mark Bloch - Holdsworth House, Sydney, Australia



To confirm your attendance at this symposium, please register your details at:
http://secure.ashm.org.au/ei/getdemo.ei?id=59&s=_2ZG0RHC8E



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**PROGRAM
AT A GLANCE**

WEDNESDAY 20 OCTOBER			
7.00am	Registration		
7.30am - 9.00am	Sexual Health Trainee Case Presentation Breakfast		
	Bayside Gallery B		
8.30am - 10.00am	HIV/AIDS Conference Opening Ceremony and Joint Conference Plenary		
	Bayside Auditorium A		
10.00am - 11.00am	Morning Tea in Exhibition and Poster Area, Bayside Grand Hall, Ground Floor		
	Ngarra Exhibition, Bayside 103 and 104, Level 1		
10.10am - 10.50am	NCHECR Surveillance Launch, Bayside Gallery A		
11.00am - 12.30pm	Joint Symposium: Instant Desire	11.00am - 12.30pm	Joint Symposium Desirable Men
	Bayside Auditorium A		Bayside Gallery B
12.30pm - 1.30pm	Lunch in Exhibition and Poster Area, Bayside Grand Hall, Ground Floor		
	ASHM AGM, Bayside Gallery A		
12.30pm - 1.30pm	Ngarra Exhibition, Bayside 103 and 104, Level 1		
		11.00am - 12.30pm	HIV/AIDS Conference Theme D : Integrating International and National Policies and Programs
			Bayside Gallery A

1.30pm - 3.00pm	Joint Symposium: Aboriginal & Torres Strait Islander Health Bayside Auditorium A	1.30pm - 3.00pm	Joint Symposium : Political, Cultural and Logistic Realities of Microbicides for Australasia and the Pacific Bayside Gallery B	1.30pm - 3.00pm	HIV/AIDS Conference Theme B Proffered Paper Session: Adherence, Treatment and Workforce Issues Bayside Gallery A
3.00pm - 3.30pm	Afternoon Tea in Exhibition and Poster Area, Bayside Grand Hall, Ground Floor				
	Ngarra Exhibition, Bayside 103 and 104, Level 1				
3.30pm - 5.00pm	Sexual Health Conference Closing and Joint Conference Debate Bayside Auditorium A				
5.15pm - 5.45pm	ASHHNA Annual Meeting, Bayside 102, Level 1				
7.00pm - 11.00pm	Sexual Health Conference Dinner at Luna Park, 6.30pm ferry departure from Darling Harbour				



THURSDAY 21 OCTOBER	
7.00am	Registration
7.00am - 8.30am	SPONSORED SATELLITE SYMPOSIUM by Gilead A new era – evidence and choice Guidelines: what are they good for? Bayside Gallery B
9.00am-10.30am	Re-thinking Prevention Plenary Bayside Auditorium A
10.30am - 11.00am	Morning Tea in Exhibition and Poster Area, Bayside Grand Hall
11.00am - 12.30pm	<div> <div>Theme B: Co-Morbidities</div> <div>Theme C: Issues in HIV Prevention in Gay Men 1</div> <div>Theme A Symposium: Translation</div> <div>Theme D: The Social Dynamics of ART and Bio-medical Prevention</div> <div>SPONSORED SATELLITE SYMPOSIUM by HIV Consortium Has HIV dropped off the global agenda? Key and current issues in promoting an effective HIV response</div> </div> <div> <div>Bayside Auditorium A</div> <div>Bayside Gallery B</div> <div>11.00am - 12.30pm</div> <div>Bayside Gallery A</div> <div>11.00am - 12.30pm</div> <div>Bayside 103</div> <div>11.00am - 12.30pm</div> <div>Bayside 104</div> </div>
12.30pm - 1.30pm	Lunch in Exhibition and Poster Area, Bayside Grand Hall

THURSDAY 21 OCTOBER 2010

PROGRAM AT A GLANCE

12.40pm - 1.25pm	Theme B Oral Posters: Co-morbidities and Clinical Monitoring	Theme C Oral Posters: HIV Prevention Issues in Gay Men	Theme D Oral Posters: Stigma and Affected Populations	
	Bayside Gallery B	Bayside 103	Bayside 104	
1.30pm - 3.00pm	Theme B: Resistance, Co-infection and Complications of HIV and its Treatment Bayside Auditorium A	1.30pm - 3.00pm Theme D: Symposium: The Dialogue between Social Science, Public Health and Medicine Bayside Gallery B	1.30pm - 3.00pm Theme C: Emerging Issues in HIV Prevention in Australia Bayside Gallery A	1.30pm - 3.00pm Theme A: Molecular Virology Bayside 103
				SPONSORED SATELLITE SYMPOSIUM by Department of Health and Ageing Young People and Youth Participation – A prerequisite for effective HIV and STI prevention Bayside 104
3.00pm - 3.30pm	Afternoon Tea in Exhibition and Poster Area, Bayside Grand Hall			
3.30pm - 5.00pm	Theme B: Symposium: Clinical Management of HIV in Ageing Population Bayside Auditorium A	3.30pm - 5.00pm Theme D: Stigma and Discrimination Bayside Gallery B	3.30pm - 5.00pm Theme C: Regional Issues in HIV prevention Bayside Gallery A	3.30pm - 5.00pm Theme A: Pathogenesis and Immunology Bayside 103
				SPONSORED SATELLITE SYMPOSIUM by Department of Health, Victoria Satellite Session A new dawn? - Victoria's response to troubled times Bayside 104
5.30pm - 7.30pm	TEST and TREAT is an evaluable, applicable and relevant prevention strategy in our region? Conference Debate accompanied by drinks and canapes Doltone House, Darling Island Wharf			



FRIDAY 22 OCTOBER				
7.00am	Registration			
7.00am - 8.45am	Case Presentation Breakfast	7.00am - 8.30am	SPONSORED SATELLITE SYMPOSIUM by Department of Health and Ageing The Research Policy and Evaluation Working Group of MACBBV5: Discussing the application of research to policy and practice	
	Bayside Gallery A & B		Bayside 103	
9.00am-10.30am	Challenges for Treatment...Resistance, Resources and the Mind			
	Bayside Auditorium A			
10.30am - 11.00am	Morning Tea in Exhibition and Poster Area, Bayside Grand Hall			
11.00am - 1.00pm	Australian Antiretroviral Guidelines Session	11.00am - 1.00pm	Theme D: Social and Cultural Aspects of HIV	Bayside Gallery A
	Bayside Auditorium A		11.00am - 1.00pm	Bayside Gallery B
			Theme C: Issues in HIV Prevention in Gay Men 2	Bayside 103
			11.00am - 1.00pm	Bayside 104
			Theme A: Translational research	
			11.00am - 1.00pm	
1.10pm - 1.55pm	Theme C Oral Posters: HIV Prevention Issues in the Region		Theme B Oral Posters: Adherence, workforce and diagnosis	
	Bayside Gallery B	Bayside 103		

1.00pm - 2.00pm	Lunch in Exhibition and Poster Area, Bayside Grand Hall				
2.00pm	Exhibition Closes				
2.00pm - 3.40pm	Theme C Symposium: Health Promotion - Turning Theory Into Practice		Theme B: HIV in Diverse Populations	Theme B: Treatment and Monitoring - Clinical Studies	Theme D: IDU, Risk and Harm Reduction in Indonesia
			2.00pm - 3.40pm	2.00pm - 3.40pm	2.00pm - 3.40pm
		Bayside Auditorium A	Bayside Gallery A	Bayside Gallery B	Bayside 103
3.40pm	Conference Close				
					SPONSORED SATELLITE SYMPOSIUM by ASHM and the HIV Consortium Supported by AusAID Addressing the Needs and Exploring the Responses of Affected Communities to HIV in PNG and the Pacific.
					Bayside 104





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KEYNOTE SPEAKERS



INTERNATIONAL KEYNOTE SPEAKERS

Dr. Calvin Cohen

Research Director, Community Research Initiative of New England and Harvard Vanguard Medical Associates, USA

Calvin J. Cohen, M.D., M.Sc. is the Research Director of both Community Research Initiative of New England and Harvard Vanguard Medical Associates. He is a Clinical Instructor at Harvard Medical School. Dr. Cohen earned his B.A. from Cornell University, his M.D. from the Albert Einstein College of Medicine, and his M.Sc. from the Harvard School of Public Health. He completed his medicine residency at Boston's Beth Israel Hospital, and a general medical fellowship at Harvard Medical School. Dr. Cohen's research focuses on HIV antiviral trials. He is a member of the Executive Committee of the INSIGHT network, an NIH-supported network of clinician-researchers. Dr. Cohen is published in *Annals of Internal Medicine* and the *New England Journal of Medicine*. He received the Outstanding Physician's Award by Harvard Vanguard Medical Associates, the Ebert Teaching award by Harvard Pilgrim Health Care, and the Community Recognition Award from the AIDS Action Committee of Massachusetts.

Dr. Eric S. Daar, M.D.

Chief, Division of HIV Medicine at Harbor-UCLA Medical Center, USA

Dr. Daar is Chief, Division of HIV Medicine at Harbor-UCLA Medical Center and Professor at the David Geffen School of Medicine, UCLA. He received his medical degree from Georgetown University and completed his residency in internal medicine and fellowship in Infectious Diseases at Cedars-Sinai Medical Center. Dr. Daar is an active clinician-investigator and author of more than 280 peer reviewed scientific articles and abstracts. His research interests relate to the management of HIV-1 infection and its complications and the immunopathogenesis of primary and chronic HIV-1 infection. He is a member of the Editorial Board and a reviewer for many scientific journals, serves as Vice Chair of the AIDS Clinical Trials Group Optimization of Antiretroviral Therapy Scientific Committee, is Chair of the NIH Prevention Trials Data Safety Monitoring Board and is a panel member of the United States Health and Human Services Guidelines Panel for Antiretroviral Therapy for Adults and Adolescents

Dr. Mark B. Feinberg, M.D., Ph.D, FACP

Vice President for Medical Affairs and Policy, Merck Vaccines and Infectious Diseases, Merck & Co., Inc., USA

Dr. Feinberg earned his BA from the University of Pennsylvania, his MD and PhD degrees from Stanford University, pursued postgraduate medical training at the Brigham and Women's Hospital of Harvard University, and served as a postdoctoral fellow with Dr. David Baltimore at the Whitehead Institute for Biomedical Research. Prior to joining Merck in 2004, Dr. Feinberg worked for over 20 years in academia and government where he was actively engaged in basic and clinical research, patient care and health policy—with a primary focus on HIV/AIDS pathogenesis, treatment and prevention research. Dr. Feinberg is a Fellow of the American College of Physicians and the recipient of an Elizabeth Glaser Scientist Award from the Pediatric AIDS Foundation. Dr. Feinberg is a member of the Council on Foreign Relations, the National Vaccine Advisory Committee (NVAC), the IOM Forum on Microbial Threats, the External Advisory Board of the HIV Vaccine Trials Network (HVTN), the Board of Directors of the African Comprehensive HIV/AIDS Partnerships, and the Board of Trustees of the National Foundation for Infectious Diseases (NFID).

Jim Pickett

Director, AIDS Foundation of Chicago, USA

Jim Pickett, a long-time AIDS advocate and activist, is the advocacy director at AIDS Foundation of Chicago, championing sound, sane policy and fighting for adequate resources at the local, state, national and international levels. He chairs the global advocacy network IRMA – International Rectal Microbicide Advocates, and leads a gay men's health collaborative project in Chicago, addressing gay men's health in a holistic, assets-based fashion, inspired by his work with the Gay Men's Health Movement. Last year, he had the pleasure of co-chairing the 2009 National LGBTI Health Summit – the fourth of its kind – in Chicago. He has been HIV-positive since 1995, and ran four marathons between 2004 and 2007 in the service of raising funds for HIV/AIDS care and prevention services. Now it seems the only time he runs is when he hears the words "cookies" or "pie"—perhaps a side-effect of (finally) settling down with Mr. Wonderful.



Professor Alan Whiteside

Director and Professor, Health Economics and HIV/AIDS Research Division, University of KwaZulu-Natal, Durban, South Africa

Alan Whiteside is the Director and Professor, Health Economics and HIV/AIDS Research Division (HEARD) which he established in 1998, at the University of KwaZulu-Natal, Durban. He has been involved in researching HIV/AIDS for over twenty years. Recent books include HIV/AIDS: A Very Short Introduction (Oxford University Press), 2008, and (with Tony Barnett), AIDS in the twenty-first century: disease and globalization (Palgrave), 2006 (2nd edition). Fellowships include a Leverhulme Visiting Professor, University of Southampton (2004-2006) and a Distinguished Visiting Fellow, Faculty of Arts and Social Science, Carleton University Canada [March 2009]. He was appointed a Commissioner on the UN Commission on HIV/AIDS and Governance in Africa between 2003 and 2006. He is a member of the editorial boards of African Journal of AIDS Research; Development Policy Review; Globalisation and Health and Journal of the International AIDS Society. He is an elected member of the Governing Council of the International AIDS Society and a member of the Waterford Kamhlaba College Governing Council.





LOCAL INVITED SPEAKERS

Paul Cameron

Clinical Immunologist, Alfred Hospital and Monash University, Melbourne

Paul Cameron completed FRACP training in Clinical Immunology and Immunopathology in Perth and his PhD from University of Western Australia where he studied the immunogenetics of HIV. He learned cellular immunology with Ralph Steinman at Rockefeller University where he established the paradigm of HIV virion carriage by Dcs, an observation that has been critical for the subsequent study of C-type lectin mediated transinfection. He returned to the Burnet Institute and the University of Melbourne and continued to work on DC biology in HIV infection using novel ex vivo models of blood, skin, and lymphoid tissue. He is currently at the Alfred Hospital and Monash University Immunology Department where he is cohead of lab with Sharon Lewin. Recent work from the lab has established a novel and efficient pathway for inducing HIV latency in T cells that depends on signaling by chemokine receptors on resting T cells.

Dr Garrett Prestage

Associate Professor, National Centre in HIV Epidemiology and Clinical Research, Sydney

Associate Professor Garrett Prestage has been a key figure in the response to HIV among gay men in Australia since the outset. He was active in gay community life in Australia since the mid-1970s through organisations like Mardi Gras, Twenty-Ten and ACON, and has conducted gay community-based research since 1983.

Since 1992, Garrett has worked at the National Centre in HIV Epidemiology and Clinical Research. He has also worked for the Australian Research Centre in Sex Health and Society since 2007. He is an Investigator for the HIV Seroconversion Study, the Gay Community Periodic Surveys and many other studies of gay men and risk. He also established several highly successful cohort studies of gay men including the SMASH, Positive Health and HIM studies.

Dr. Edwina Wright

Alfred Hospital, Burnet Institute and Faculty of Medicine, Nursing and Health Sciences Monash University, Melbourne

Dr Edwina Wright is an Infectious Diseases physician at the Alfred Hospital, heads the Asia Pacific NeuroAIDS Consortium (APNAC) Program at the Burnet Institute and is Co-Director of the Australian National NeuroAIDS Brain and Tissue Bank Project. Her key clinical research interest is in the field of HIV neurology. Since 2002 Dr Wright has chaired APNAC which comprises a group of physicians, scientists and social researchers with a shared interest in NeuroAIDS. With her APNAC colleagues Dr Wright has studied the epidemiology of NeuroAIDS across several countries of the Asia Pacific Region. She is involved in studies of the role of host genetics in NeuroAIDS and in large international clinical trials designed to determine the impact of different antiretroviral treatment strategies upon HIV-associated neurocognitive disorders: Dr Wright chaired the SMART Neurology Substudy and is currently the Chair of the START Neurology Substudy. In 2009 Dr Wright was elected Vice-President of ASHM.



ROLL OF HONOUR

For the 2009 conference the Roll of Honour was introduced as a new way of recognising the achievements of colleagues who have retired or reduced their involvement in the field of HIV in recent years.

The Roll of Honour includes those who have had Memorial Sessions named were after them, ensuring we honour the memory of those people who have contributed greatly to the sector.

2010 Roll of Honour

Anne Mijch

Anne Mijch has worked in HIV from 1984 until 2007 in Victoria, Australia as a clinician and researcher and teacher. She is still currently working in the same area in similar roles.

Alex Wodak

Dr Alex Wodak, Director of the Alcohol and Drug Service, St. Vincent's Hospital, Sydney since 1982, has major interests in the prevention of HIV among injecting drug users prison and drug policy reform. Dr. Wodak is President of the Australian Drug Law Reform Foundation and was President of the International Harm Reduction Association (1996-2004). He helped establish the first needle syringe programme and first medically supervised injecting centre in Australia (when both were pre-legal) and often works in developing countries on HIV control among IDUs. Dr. Wodak was awarded the AM in 2010. He helped establish ASHM, NUAA and NDARC.

Previous Roll of Honour Inductees

David Bradford
Ron Lucas
Margaret MacDonald
Phillip Medcalf
Peter Meese





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GENERAL INFORMATION



GENERAL INFORMATION

DISCLAIMER

The information in this brochure is correct at the time of printing. The secretariat reserves the right to change any aspect of the program without notice.

Venue

Sydney Convention and Exhibition Centre
Darling Drive, DARLING HARBOUR
Ph: +61 2 9282 5000
Fax: +61 2 9282 5041

The venue will host the conference sessions, poster presentations, the breakfast session, conference day catering and the trade exhibition.

REGISTRATION DESK

The registration desk will be located on the Ground Level, Main Entrance, Sydney Convention & Exhibition Centre. All enquiries should be directed to the registration desk which will be open at the following times:

Tuesday	19 October 2010:	3.30pm to 5.30pm
Wednesday	20 October 2010:	7.00am to 5.30pm
Thursday	21 October 2010:	7.00am to 5.30pm
Friday	22 October 2010:	7.00am to 3.30pm

SPEAKER PREPARATION ROOM

A speaker preparation room will be located in Bayside 108, Level 1. This room will be open at the following times:

Tuesday	19 October 2010:	3.30pm to 6.00pm
Wednesday	20 October 2010:	7.00am to 6.00pm
Thursday	21 October 2010:	7.00am to 6.00pm
Friday	22 October 2010:	7.00am to 2.30pm

All speakers must take their presentation to the speaker preparation room a minimum of four hours prior to their presentation or the day before if presenting at a breakfast or morning session.

EXHIBITION

An exhibition will be held in Bayside Grand Hall on the ground floor of the Sydney Convention and Exhibition Centre which also contains the posters and all the catering.

The exhibition will open for the HIV/AIDS Conference on Wednesday 20 October 2010 at 10.00am and conclude on Friday 22 October 2010 at 2.00pm.

The exhibition will be open during the following hours:
Wednesday 20 October 2010: 10.00am – 5.00pm
Thursday 21 October 2010: 8.30am – 5.00pm
Friday 22 October 2010: 8.30am – 2.00pm

The exhibition for the Australasian Sexual Health Conference will also be available for viewing on Wednesday 20 October 2010 from 8.30am to 5.00pm.

POSTER DISPLAYS

Posters will be displayed, grouped in their disciplines, for the duration of the conference in Bayside Grand Hall on the ground floor of the Sydney Convention and Exhibition Centre. On Wednesday 20 October, posters for Themes A and D will be located on Level 1, outside Bayside Auditorium A.

INTERNET HUB

An Internet hub, proudly sponsored by ASHM, will be available near the lounge seating in the Bayside Grand Hall on the Ground Floor

Six computers will be available for:

- Completing an online conference evaluation survey
- Printing a certificate of attendance
- Viewing the abstract search database
- Viewing delegate lists

WIRELESS

Wireless will be available in the Bayside Grand Hall. In order to receive the access instructions please visit the Conference Secretariat at the registration desk.



HIV PRESCRIBER CME POINTS:

HIV s100 prescribers who are accredited in NSW/ACT/VIC/SA will receive 3 Prescriber CME points per day, up to a maximum of 25 points over the triennium, for their attendance at the conference.

RACP/ACHSHM:

Registrants may claim 1 credit point/hour of the conference attended to a maximum of 50 credits annually in the Category 2: Group learning activities section.

The onus is on the Fellow themselves to determine the total number of credit points they may claim and to claim them. Further information and access to the MyCPD program is available at www.racp.edu.au.

RACGP:

Application has been made to have attendance recognised for Quality Assurance & Continuing Professional Development. If you wish to claim these points please fill in your RACGP activity number during registration online and sign the attendance sheet at the registration desk.

SMOKING

This conference has a no smoking policy.

MOBILE PHONES /BEEPERS

As a courtesy to all delegates and speakers, please switch off, or set to silent, your mobile phones and beepers during all sessions.

NAME BADGES

For security purposes, all attendees must wear their name badge at all times while in the conference venue. Entrance to the exhibition will be limited to badge-holders only. If you misplace your name badge, please advise staff at the registration desk.

PERSONAL MAIL

The conference organisers do not accept responsibility for personal mail. Please have all mail sent to your accommodation address.

EVALUATION SURVEYS

The evaluation survey is being conducted by an independent researcher, UltraFeedback, who will provide individual links to your email account for you to fill out the survey. We appreciate your feedback.

DELEGATE LIST

A Delegate List will be viewable at the Internet Hub.

LIABILITY/INSURANCE

In the event of industrial disruptions or natural disasters the Australasian Society for HIV Medicine cannot accept responsibility for any financial or other losses incurred by delegates. Nor can the Secretariat take responsibility for injury or damage to property or persons occurring during the conference or associated activities. Insurance is the responsibility of the individual delegate.

SCHOLARSHIP SPONSORS

Thank you to the following supporters of the 2010 Conference Scholarships: Abbott, Australian Government, Department of Health and Ageing, Boehringer Ingelheim, Bristol Myers Squibb, Department of Health, Western Australia, Gilead, Janssen, MSD and Queensland Government Department of Health.

UltraFeedback is the Australasian HIV/AIDS Conference 2010 research provider and will be gathering your feedback regarding the event. UltraFeedback is an Australian research agency with particular expertise in gathering feedback from those in the health sector including patients, carers, providers, clinicians and all associated health professionals. UltraFeedback can design and administer a survey program to meet your needs as well as undertake focus groups, one on one interviews or develop a marketing strategy for a product launch. As a full service market research agency, UltraFeedback has the access and resources you need to solve your business challenges. For further information please contact Felicity Johns on 03 9439 7789 / 0403 141 219 or felicity.johns@ultrafeedback.com.

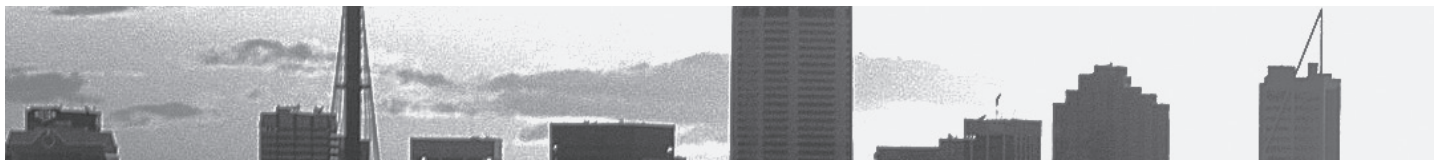




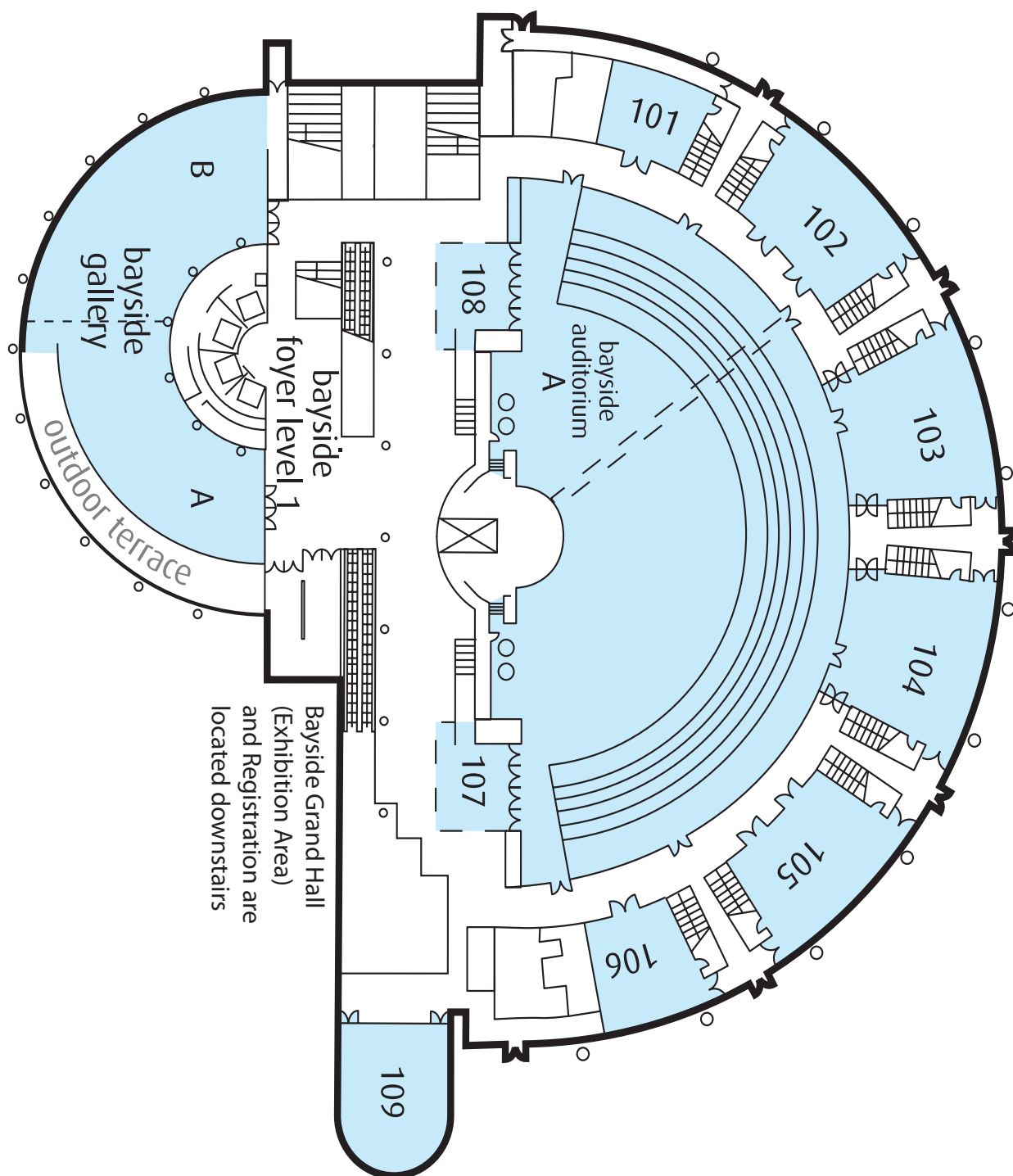
LOCATION MAP - SYDNEY

LOCATION MAP





VENUE FLOOR PLAN



VENUE FLOOR PLAN





NGARRA

NGARRA

EXHIBITION

Bayside Rooms 103 & 104
20 October 2010
10.00am – 3.30pm

Ngarra exhibition (meaning to tie in the Sydney Language) showcases sexual health initiatives currently being adopted or developed around the country for Aboriginal and Torres Strait Islander populations. We are grateful to and acknowledge the Metropolitan Local Aboriginal Land Council who suggested the name and gave consent for its use for this exhibition.



ASSOCIATED EVENTS

SEXUAL HEALTH CONFERENCE GALA DINNER

Wednesday 20 October 2010, 7.00pm
Luna Park, Sydney

Join us at Luna Park and relive the 1930's fun fair experience. The evening will start with a cruise across the famous Sydney Harbour. The boat will arrive at the iconic Luna Park where you will be immersed in the historic fun park's characters and have the opportunity to ride the ferris wheel. A live band will get you up and dancing, and a few rounds of table trivia will challenge you. This is a dinner not to be missed!

Ticket cost:

Tickets only available onsite if cancellations received
Australasian HIV/AIDS & Sexual Health Conference
joint registrants: Complimentary
Australasian HIV/AIDS Conference
only registrations: A\$120
Partners/Guests: A\$120

SPONSORED SATELLITE SYMPOSIUM A NEW ERA – EVIDENCE AND CHOICE GUIDELINES: WHAT ARE THEY GOOD FOR?

Sponsored by Gilead

Thursday 21 October 2010, 7:00am – 8:30am
Bayside Gallery B, Sydney Convention
& Exhibition Centre

A panel of national and international experts will provide insight into the decision making behind the guideline recommendations for preferred ART regimens and discuss suitable alternatives to the first-line recommendations. New information regarding adherence to treatment guidelines by Australian HIV physicians will also be presented followed by an interactive panel discussion

Ticket cost:

Tickets available (dependent on capacity) until 1.30pm on Wednesday 20 October at the registration desk
Australasian HIV/AIDS & Sexual Conference joint registrants: complimentary

NGARRA EXHIBITION

Wednesday 20 October 2010, 10.00am – 3.30pm
Bayside Rooms 103 & 104

Ngarra exhibition (meaning 'to tie' in the Sydney Language) showcases sexual health initiatives currently being adopted or developed around the country for Aboriginal and Torres Strait Islander populations. We are grateful to and acknowledge the Metropolitan Local Aboriginal Land Council who suggested the name and gave consent for its use for this exhibition.

TEST AND TREAT DEBATE

Sponsored by Boehringer Ingelheim & NSW Health
Thursday 21 October 2010, 5.30pm – 7.30pm
Doltone House, Darling Island Wharf

This evening will combine a stimulating debate with excellent food and wine, taking place in the stunning setting of Doltone House.

Keynote speakers will take part in this important "TEST and TREAT is an evaluable, applicable and relevant prevention strategy in our region?" facilitated by Professor David Cooper. The debate will be accompanied by drinks and canapés and will also provide an opportunity to network over drinks.

Ticket cost:

Tickets available until 1.30pm on Wednesday 20 October at the registration desk
Australasian HIV/AIDS & Sexual Health Conference
joint registrants: A\$20
Australasian HIV/AIDS Conference only registrants: A\$20
Partners/Guests: A\$66
The \$20 fee will go towards the ASHM Gift Fund.



CASE PRESENTATION BREAKFAST

Sponsored by Gilead, MSD, Janssen

Friday 22 October 2010, 7.00am

Bayside Gallery A & B, Sydney Convention and Exhibition Centre

Case presentations supported by brief literature reviews and open to audience questions are presented, during which breakfast will be served. The best Case Presentation will be awarded a cash prize.

The Case Presentation Breakfast is optional and is not included in any of the registration fees.

Tickets available (dependent on capacity) until 1.30pm on Wednesday 20 October at the registration desk

All registrants: A\$22

AUSTRALIAN ANTIRETROVIRAL GUIDELINES SESSION

Friday 22 October, 11.00am-1.00pm

Bayside Auditorium A, Sydney Convention & Exhibition Centre

International invited speaker and member of the USA DHHS Antiretroviral Guidelines Panel Dr Eric Daar, will present on the timing of commencement of antiretroviral therapy and what antiretroviral therapy to start with. Prof. Matthew Law will outline the strengths and weaknesses of recent cohort studies that have addressed the question of when to start antiretroviral therapy. The session will promote questions and discussion about these issues as they relate to the Australian Commentary on the USA DHHS Antiretroviral Guidelines.

SATELLITE SESSION: SEX WORK REGULATION SESSION: BEST PRACTICE MODELS FOR PUBLIC AND SEX WORKERS' HEALTH

Friday 22 October, 4.00pm-5.00pm

Sydney Convention & Exhibition Centre

A panel of invited international speakers will present compelling evidence on how different models of sex industry regulation impact on sex workers and health promotion outcomes. The presenters will provide evidence from countries with different models of regulation including decriminalisation (New Zealand and New South Wales, Australia), Criminalisation (Papua New Guinea), and the Criminalisation of the clients of sex workers (Sweden). Questions and discussion will be promoted in this session. This is an essential session for all concerned with BBV prevention, public health and sex workers' health.

ASSOCIATED EVENTS

TICKETS TO ASSOCIATED EVENTS

Tickets and/or name badges will be required for entry to the majority associated events. All tickets will be given out on registration. A no-refund policy operates for cancellation of function tickets.



Australian Government
Department of Health and Ageing

Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmissible Infections (MACBBVS)

Research Priorities and Evaluation Working Group

Satellite Session

**The Research Priority and Evaluation Working Group of MACBBVS:
Discussing the application of research to policy and practice**

Friday 22 October, 7.30am – 9.00am

Background

Recently, a working group of MACBBVS was established to address issues related to research and evaluation identified in the suite of national strategies released in 2010. The working group includes researchers from a range of disciplines and interests as well as representatives of community organisations and health services. The working group will be functional for about 12 months (that is, until August 2011).

The working group will be addressing two main issues (1) developing mechanisms to enhance the use of research in policy and practice and (2) setting a process for commenting on research priorities.

Aim and Layout

Moderator: Associate Professor Carla Treloar

Group Discussion Leaders: Members of Working Group

1. Introduce the working group including membership and terms of reference, outline goals and format of session
2. Discussion: How organisations become aware of, access and use research
3. Discussion: What mechanisms would assist organisations in using research more/better
4. Outline the next steps in addressing this issue



ashm
Australasian HIV/AIDS Conference 2010
22nd Annual Conference of the Australasian Society for HIV Medicine
Sydney, 20-22 October 2010

Wednesday 20 - Friday 22 October 2010
Sydney Convention and Exhibition Centre, Darling Harbour, Sydney

**EXHIBITION
DIRECTORY**

EXHIBITOR BOOTH LISTING

COMPANY	BOOTH NUMBER/S
APN+ Asia Pacific Network of PLHIV	25
Abbott Australasia	8
Alere	14
Australasian Society for HIV Medicine	1
Boehringer Ingelheim	22
Bristol-Myers Squibb	21
Four Seasons Condoms	24
Gilead	23
HIV Consortium	3
HIV s100 Prescriber Renewals	2
MSD Virology	20
NAPWA/AFAO	6
National Centre in Social Research	7
Novartis Pharmaceuticals	4
NSW Health	13
Sanofi Aventis	5
Janssen Australia	9
ViiV Healthcare	15

The following Companies are exhibiting during the Australasian Sexual Health Conference and will be available on Wednesday 20 October only.

COMPANY	BOOTH NUMBER/S
Australasian Chapter of Sexual Health Medicine	12
Contiform International	11
CSL Biotherapies	10
GlaxoSmithKline	16
Lilly Australia	19
Marie Stopes International and Sexual Health & Family Planning Australia	17
Medical Industries Australia	18



EXHIBITOR BOOTH LISTING

25. APN+

(Asia Pacific Network of PLHIV) is the regional peak body of PLHIV networks covering 30 countries in Asia and the Pacific, and is based in Bangkok. Its main roles are in advocacy and representation of PLHIV interests, and in capacity development of its membership of national PLHIV groups and networks. The four areas of work described in the Strategic Plan are, advocacy, capacity building, knowledge sharing and network building, supported by an effective and functional secretariat.

Key priorities for PLHIV in the region are equitable access to care, treatment and support, reduction in stigma and discrimination, and addressing issues such as criminalisation of HIV and the need for work and income. To support advocacy in these areas APN+ conducts peer lead research amongst its constituencies.

APN+ operates through four Working Groups (Women, IDU, MSM and Treatment) involving positive people throughout the region and encouraging leadership on issues affecting us.



8. ABBOTT AUSTRALASIA

For more than 100 years, Abbott people have been driven by a constant goal: to advance medical science to help people live healthier lives. It's part of our heritage, and it continues to drive our work.

Abbott employees are committed to the discovery, development, manufacture and marketing of health care products and services.

Our products span the continuum of care, from nutritional products & laboratory diagnostics through medical devices & pharmaceutical therapies including Kaletra, Humira & Reductil. Today, 72,000 employees around the world share the passion for "Turning Science Into Caring". It's a commitment to focusing on what matters most: life and the potential it holds when we are feeling our best.

With research and development centres, sales and marketing offices, and manufacturing and distribution facilities in 130 countries, Abbott is recognized not only for our global reach and ability to serve customers around the world, but also as a good employer and global citizen.



14. ALERE

Alere empowers people to take control of their health by actively integrating diagnostics and health management solutions to provide timely, actionable information in a range of environments from hospital to home.

We provide in vitro diagnostics in the fields of cardiovascular, infectious diseases, women's health, prenatal care, drugs of abuse and oncology. We support healthcare workers and patients by developing simple diagnostic equipment to ensure better quality in both inpatient and outpatient care.

We are a global leader in the field of rapid diagnostic tests which are designed to improve the quality of patient care. Specific product lines include tests for the rapid and early diagnosis of myocardial infarction, influenza, acute kidney damage and HIV infection.



1. ASHM

The Australasian Society for HIV Medicine (ASHM) is the peak organisation representing health professionals in Australia and New Zealand who work in those areas of health concerned with HIV. ASHM is a key partner in the development of public policies related to continuing medical education, community prescribing and national treatment guidelines for HIV and viral hepatitis. ASHM provides services to members and a range of other individuals and organisations working in the HIV, viral hepatitis and sexual health sector.

**ashm**

Australasian Society for HIV Medicine

22. BOEHRINGER INGELHEIM

Boehringer Ingelheim is committed to active involvement and practical answers for people living with HIV. The fight against HIV/AIDS extends to resource-poor settings, where Viramune® (nevirapine) has been donated to treat more than 1,747,000 mother-child pairs 170 programmes in 60 countries through the Viramune Donation Programme. Boehringer Ingelheim is also proud to be a member of the Collaboration for Health in PNG (CHPNG). The CHPNG is the initiative of a group of Australian pharmaceutical companies who are dedicated to making a philanthropic contribution towards improving the health and wellbeing, and political and social stability of Australia's nearest neighbour and is currently working with its partners to provide education and support to health care workers in PNG.

**Boehringer
Ingelheim****Contact:**

PO Box 1969
Macquarie Centre
NORTH RYDE NSW 2113
Phone: 61 2 8875 8833
Fax: 61 2 8875 8712

21. BRISTOL-MYERS SQUIBB

Bristol-Myers Squibb Australia
556 Princes Hwy, Noble Park VIC 3174
Tel: 03 9213 4000
Fax: 03 9701 1526
Web: www.bmsa.com.au

**Bristol-Myers Squibb**
Virology Division**Ross Volteas: Product Manager - Virology**Email: ross.volteas@bms.com**Lili Munafo: Disease Area Specialist - Virology**Email: lili.munafo@bms.com**24. FOUR SEASONS CONDOMS**

With over 20 years experience in condoms and sexual health products, we are excited to launch our range of Naked condoms – they feel like not wearing a condom at all! Designed to be ultra thin but also extra strong, the Naked range is available in three completely different sizes of tighter 49mm, classic 54mm and larger 60mm. Ask for sample of our Naked flavour condom range and water based lubricants, and grab one of our promotional tin packs. Four Seasons is a Quality Endorsed company and 100% Australian owned and operated.



23. GILEAD

Gilead's mission is to advance patient care by developing therapeutics to treat life-threatening diseases. We apply biopharmaceutical science to create medicines to treat conditions including HIV/AIDS (ATRIPLA® [tenofovir disoproxil fumarate & emtricitabine & efavirenz], Truvada® [emtricitabine & tenofovir disoproxil fumarate], Emtriva® [emtricitabine], Viread® [tenofovir disoproxil fumarate]), chronic hepatitis B (Viread® [tenofovir disoproxil fumarate], Hepsera® [adefovir dipivoxil]), and systemic fungal infections (AmBisome® [liposomal amphotericin B])



Company name: Gilead Sciences Pty Ltd

Address: Level 1, 128 Jolimont Road, East Melbourne, Victoria, 3002, Australia

Phone: +61 (0)3 9272 4400

Fax: +61 (0)3 9272 4411

3. THE HIV CONSORTIUM FOR PARTNERSHIPS IN ASIA AND THE PACIFIC

The HIV Consortium for Partnerships in Asia and the Pacific is a collaboration of nine Australian HIV organisations formed to foster strategic partnerships and linkages between Australia and the Asia and Pacific regions.

The organisations who are members of the HIV Consortium seek to develop long-term relationships with counterpart organisations. In collaboration with our partners the HIV Consortium supports skills building, organisational strengthening and leadership development. Our activities aim to recognise and identify existing capacity, and to build on this collaboratively through a partnership approach.



The HIV Consortium is implementing the Regional HIV Capacity Building Program funded by AusAID.

2. HIV S100 PRESCRIBER RENEWALS

HIV s100 prescribers from NSW, Victoria, South Australia and the ACT will be able to complete the new and improved online prescriber renewal process for the current triennium. ASHM staff will be available to help prescribers complete the process and answer any questions.



ashm
Australasian Society for HIV Medicine

ASHM INTERNATIONAL GIFT FUND

ASHM members and conference participants are encouraged to visit the special booth where you can meet our regional partners and learn more about ASHM's regional program and make donations to support this work. PNG carry bags - 'billums' - made by a group of HIV positive women and their friends in PNG will be on sale. All proceeds go to supporting these women and their communities.



20. MSD VIROLOGY

MSD/Merck & Co. has been involved in HIV research since the early 1990s.

Over the ensuing 20 years the company has been instrumental in the early discovery & development of PIs (CRIVAN® - indinavir) & NNRTIs (STOCRIN® - efavirenz).



Over the past 10 years MSD/Merck & Co. has pioneered the discovery & development of the first integrase inhibitor to reach commercial development. ISENTRESS® (raltegravir) is the first in class of the InSTIs.

Schering Plough, now part of MSD, conducted much of the pioneering development work on the chemokine receptor antagonists (CCR5 inhibitors) for the treatment of HIV & has developed PEGATRON® (peg-interferon alfa-2b + ribavirin) for the treatment of HCV.

6. THE NATIONAL ASSOCIATION OF PEOPLE LIVING WITH HIV/AIDS (NAPWA)

The National Association of People Living with HIV/AIDS (NAPWA) is Australia's peak non-government organisation representing community-based groups of people living with HIV.

NAPWA provides advocacy, effective representation, policy, health promotion and outreach on a national level. The Association's work includes a range of health and education initiatives that promote the highest quality standard of care for HIV positive people. NAPWA contributes to clinical and social research into the incidence, impact and management of HIV. NAPWA strives to minimise the adverse personal and social effects of HIV by championing the participation of positive people at all levels of the organisation's activity.



Contact:

National Association of People Living with HIV/AIDS (NAPWA)

PO Box 917, Newtown NSW 2042, Australia

Tel: 61 2 8568 0300

Fax: 61 2 9565 4860

Email: admin@napwa.org.au

Web: www.napwa.org.au

AFAO

The Australian Federation of AIDS Organisations (AFAO) is the national federation for the HIV community response. We provide leadership, coordination and support to the national policy, advocacy and health promotion response to HIV/AIDS. Internationally we contribute to the development of effective policy and programmatic responses to HIV/AIDS at regional and global levels.

AFAO's work is primarily directed towards population groups where we have the highest level of expertise and where the incidence of HIV or the risk of HIV is greatest, namely: gay men, HIV positive people, injecting drug users, sex workers and Aboriginal and Torres Strait Islander people.



Contact:

Australian Federation of AIDS Organisations

PO Box 51, Newtown NSW 2042, Australia

Tel: 61 2 9557 9399

Fax: 61 2 9557 9867

Address: PO Box 51, Newtown, NSW, 2042

Email: afao@afao.org.au



Web: www.afao.org.au

7. NATIONAL CENTRE IN SOCIAL RESEARCH

The National Centre in HIV Social Research (NCHSR) advances a multi-disciplinary perspective in the study of HIV, viral hepatitis and sexually transmissible infections (STIs). The work of the NCHSR in particular broadens the traditional focus on the individual in health behaviour research to emphasise the social, cultural and political processes that influence risk and vulnerability, and affect living with HIV or hepatitis C. Social researchers at the NCHSR make contribute to academia and the community and are committed to the generation of new and strategic knowledge to reduce the impact of HIV, viral hepatitis and STIs in Australia and overseas.



4. NOVARTIS PHARMACEUTICALS

Novartis is a world leader in the research, development and supply of products to protect and improve health and well-being.

Our core businesses are in pharmaceuticals, consumer health (including eye-care and animal health), generics and vaccines. In Australia, Novartis employs more than 600 people and invests over AUD \$30million annually in local research activities.

Our name, derived from the Latin 'novae artes', means 'new skills' and reflects our focus on research and development to bring new treatments to patients and physicians world-wide.

www.novartis.com.au



13. THE NSW SEXUALLY TRANSMISSIBLE INFECTIONS PROGRAM UNIT (STIPU)

The NSW Sexually Transmissible Infections Program Unit (STIPU) was established by NSW Health to:

- coordinate implementation of the NSW STI Strategy
- provide leadership to the sexual health workforce; and to
- establish dedicated sexual health projects and research to support actions identified in the Strategy.

STIPU focuses on supporting GPs in managing STIs in primary healthcare settings, GP research and STI contract tracing and assisting publicly funded sexual health services in targeting priority populations. STIPU also promotes community awareness of STIs and supports the NSW Sexual Health Infoline.



Contact: STI Programs Unit

Level 3 Nightingale Wing, Sydney Hospital,
GPO Box 1614, Sydney 2001

Email: General Practice Project: Carolyn.Murray@sesiahs.health.nsw.gov.au

Publicly Funded Sexual Health Services Project: Leng.Boonwaat@sesiahs.health.nsw.gov.au

Social Marketing Project: Liz.Story@sesiahs.health.nsw.gov.au

Web: <http://www.stipu.nsw.gov.au/>

THE BOBBY GOLDSMITH FOUNDATION

Established in 1984, the Bobby Goldsmith Foundation is Australia's longest-running HIV charity.

Our mission is to help people living with HIV (PLHIV) by providing practical, emotional and financial support so they can maintain their independence and improve their quality of life. It's the kind of ongoing, unconditional support that usually only friends or family would provide.





The core services BGF provides to its clients are:

- direct financial assistance (mainly for medications, medical care, dental care, course fees and materials);
- a financial counselling service;
- access to a No Interest Loans Scheme (NILS®);
- a range of supported accommodation programs;
- a vocational counselling service (Positive Futures);
- a program of capacity building workshops (Phoenix and PosQuest Workshops) and
- an extensive outreach program to regional and rural NSW.

POSITIVE LIFE

who we are...

Positive Life NSW (previously PLWHA NSW) is a small, professional community organisation managed by people with HIV. Since 1988 we have been working to promote the rights, health and well-being of people with HIV, their partners and families in NSW.

our aims...

Our vision is to ensure that people with HIV are given the opportunity to have and maintain the best standards of health and quality of life.

We aim to represent people with HIV in NSW, their partners and communities, and provide health promotion, advocacy and peer support. We also aim to remove prejudice, isolation and discrimination against people with HIV.

what we do...

Positive Life NSW works to improve conditions and services for people with HIV. We have strong partnerships with HIV health services, community organisations, government departments and research agencies. We provide information and support for people living with HIV, and the wider community.

Our projects include: advocacy, peer support (After Hours, 729), Positive Speakers' Bureau, publications (Talk-about, Contacts directory), information and referrals, campaigns and education.

For more information visit www.positive-life.org.au or call 02 9361 6011; Freecall 1800 245 677

PositiveLifeNSW
the voice of people with HIV since 1988

ACON

ACON is NSW's and Australia's largest community-based gay, lesbian, bisexual and transgender (GLBT) health and HIV/AIDS organisation.

We promote the health and wellbeing of the GLBT community and people affected by HIV, and reduce HIV transmission.

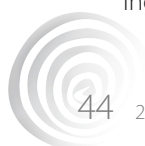
We run HIV prevention programs for the groups most at risk of HIV transmission – gay men, sex workers and people who inject drugs. For people with HIV, their families and carers, ACON provides a broad range of health promotion and support services. In the area of policy and advocacy, ACON provides advice on issues related to HIV and human rights.

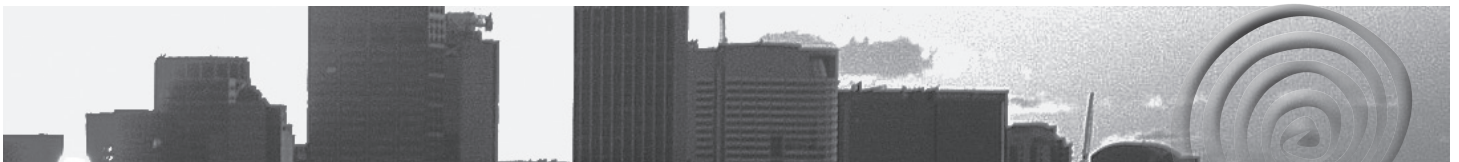
Our work also covers other health issues for our communities such as:

- Sexual health
- Mental health
- Alcohol and other drug use
- Ageing
- Homophobic violence
- Domestic violence
- Counselling
- Community care
- Housing

The people and communities we serve face the same broad health issues as everyone else. However, mainstream service providers don't always respond adequately to their needs due to a lack of knowledge, understanding or acceptance, especially in regional and rural NSW.

acon 
BUILDING OUR COMMUNITY'S
HEALTH & WELLBEING 1985-2010





Our communities also have specific health needs that are best met by community-based organisations with specialist knowledge and experience, particularly in relation to HIV, sexual health, discrimination and social isolation. We meet this dual challenge by providing information and services that support the specific needs of our communities, particularly people with HIV. We also work to close the gap by improving access to mainstream services. So what do we hope to achieve by doing all this?

- An end to the HIV/AIDS epidemic locally and globally
- A healthy, resilient and inclusive GLBT community
- A society that protects and promotes human rights as the foundation for good health

Contact: ACON's Media and Communications Team

Tel: (02) 9206 2001

Free Call: 1800 063 060

Hearing Impaired: (02) 9283 2088

Email: mbadorrek@acon.org.au

5. SANOFI AVENTIS

The ambition of sanofi-aventis is to become a diversified global healthcare leader, focused on patients' needs. The largest pharmaceutical company in Europe and in emerging markets, sanofi-aventis is the fourth largest worldwide. The Group's vaccine division, sanofi pasteur, is the world leader for human vaccine production and commercialisation.

sanofi aventis

Because health matters

With the recent acquisition of Australia's leading nutraceutical brands including Nature's Own and Cenovis, sanofi-aventis ANZ is now a horizontally integrated health care provider from complementary medicines, through to patented medicines, generics, over the counter medicines, and vaccines.

Sanofi-aventis has a strong commitment to R&D and we currently have 59 compounds in development. At sanofi-aventis we are committed to our customers, our employees, and even more importantly to the people who rely daily on our medicines.

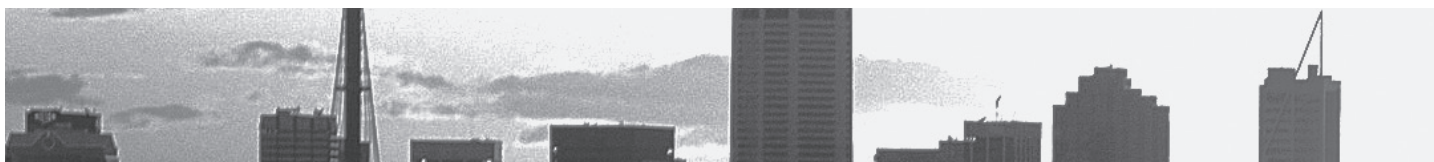
9 JANSSEN AUSTRALIA

Janssen Australia; formerly known as Tibotec Division of Janssen-Cilag Pty Ltd, is a leading research-based pharmaceutical company, dedicated to improving the health and well-being of all Australians. By embracing innovation, developing our people and celebrating success, we will inspire our customers with patient focused healthcare solutions. Janssen is the seventh largest pharmaceutical company in the world. We research and develop prescription medicines for some of the world's most serious and prevalent diseases, ranging from cancer and rheumatoid arthritis, to life-threatening bacterial infections and HIV/AIDS.



Janssen also recognizes its responsibility to collaborate in the international response to HIV/AIDS, a challenge which cannot be separated from the fight for gender equality and poverty reduction.

Janssen
1-5 Khartoum Road
Macquarie Park NSW 2113
Ph: 1800 226 334
Fax: (+61) 2 8875 3300



15 A NEW APPROACH TO TREATING HIV/AIDS

We are ViiV Healthcare - a global specialist HIV company established by GlaxoSmithKline and Pfizer to deliver advances in treatment and care for people living with HIV. Our aim is to take a deep and broad interest in HIV/AIDS and then take a new approach to deliver effective and new HIV medicines as well as support communities affected by HIV.



Our strategy

We know that medicine faces some big challenges in tackling the diverse and complex needs of people living with HIV/AIDS across the globe. That's why a new approach is needed.

Supported by a broad product portfolio of currently-marketed medicines, our approach will not focus solely on creating new medicines but on exploring the full potential of all of our medicines and pipeline.

Contact

ViiV Healthcare Australia

Level 4, 436 Johnston Street, Abbotsford 3067

Tel: 03 9721 6161

Website: www.viivhealthcare.com

UNDERGRADUATE AND JUNIOR RESEARCHER IN HIV AND VIRAL HEPATITIS AWARDS PROGRAM 2010

ASHM offers a number of annual Support Awards to junior researchers in the fields of HIV and viral hepatitis. The Awards are offered to foster research interests in HIV and viral hepatitis, and applications are invited from a range of relevant disciplines including medicine, nursing, dentistry and allied health. Awards are given for quality research that reflects national priority action areas as outlined in the National HIV/AIDS Strategy, the National Hepatitis C Strategy and the first National Hepatitis B Strategy.

Due to the outstanding quality of each application in 2010, our judging panel decided to confer five support awards.

This year's awardees receive among other things: complimentary registrations at the 2010 Australasian HIV/AIDS Conference in Sydney or 2010 Viral Hepatitis Conference, Melbourne; scholarships for travel and/or accommodation to assist attendance at the chosen conference; ASHM Membership for 2010; access to the ASHM website to showcase their research project; participation in relevant ASHM committees; and access to the ASHM library, resources and archives.

Congratulations are extended to the following 2010 awardees:

Jennifer La

Sushama Telwatte

Jamee Newland

Julie Wang

Ivy Shih





ASHM JUNIOR RESEARCHER SUPPORT AWARDS 2011

ASHM is offering support awards in 2011. The awards are available to promote research interest in HIV and viral hepatitis. Applications should be made in writing via the application form available on the ASHM website, and must be received by ASHM by COB 7 February 2011. Please attach your abstract and a photocopy of your most recent academic transcript (if relevant).

THE AWARDS WILL COMPRISE:

- Annual Student ASHM Membership for 2011
- Links between the junior researcher and ASHM Members in the designated area of research interest
- Access to the ASHM website to allow researchers to place information about their research project
- Participation in relevant ASHM Committees
- Access to ASHM library, resources and archives
- Option to take on part-time research assistant positions offered by ASHM
- Registration at the 2011 Australasian HIV/AIDS Conference, or 2012 Viral Hepatitis Australasian Conference
- Presentation of a poster following abstract submission to the chosen conference in a special poster session (required)
- Scholarship for recipients requiring travel and/or accommodation to assist with attendance at the conference to a value of A\$400
- Publication of a short report on the research initiative in an edition of ASHM e-Newsletter

THE APPLICATION PROCESS:

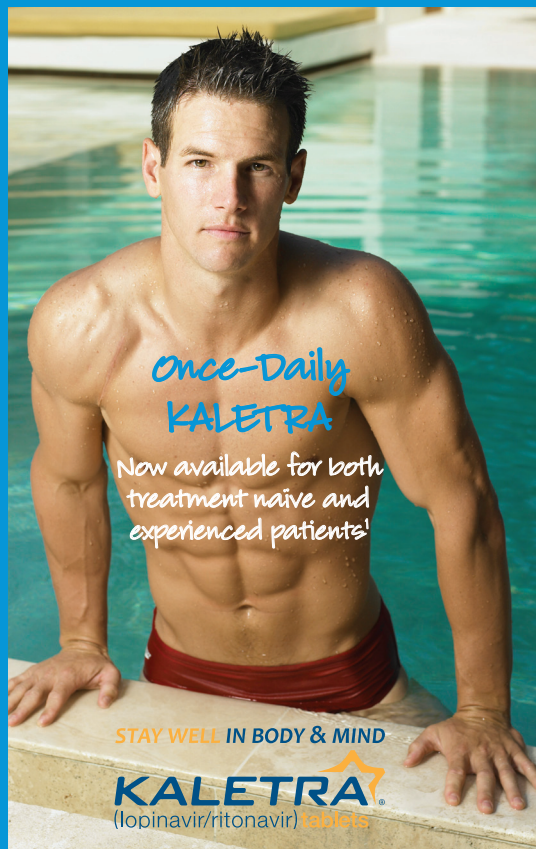
Applications are invited from all relevant disciplines, with priority given to medicine, nursing, dentistry and allied health; and must relate to a current degree, diploma, physician training program or post-doctorate award program. Applications from researchers who have already completed their post-doctorate study will not be accepted. The Junior Researcher Support Award is available for residents of Australia and New Zealand only and can be for new research or work in progress. The Award is funded by ASHM and the ASHM Tax Deductible Domestic Gift Fund with administrative support from the Australian Government Department of Health and Ageing.

Abstracts of no more than 350 words should be submitted in writing, along with the application form which is to be requested. Please note that applications which reflect the national priority action areas for research, as outlined in the National HIV/AIDS Strategy the National Hepatitis C Strategy and the National Hepatitis B Strategy, will be given precedence. These research areas can be found on the Commonwealth website at www.health.gov.au or via the ASHM website at www.ashm.org.au.

The ASHM Junior Researcher Support Award application form is available at: http://www.ashm.org.au/default2.asp?active_page_id=423

A sub-committee of the ASHM Board will review the applications, and applicants will be notified of the outcome of their application by 01 April 2011.

For further information please review the ASHM website or contact Natalie Candarakis at Natalie.candarakis@ashm.org.au or Tel: 02 8204 0700.



Please review full product information before prescribing.

Full Product Information is available on request from Abbott Australasia Pty Ltd. ABN 95 000 180 389. 32 – 34 Lord Street, Botany, NSW 2019. **INDICATIONS:** For the treatment of HIV-infection in combination with other antiretroviral drugs in adults and children aged 2 years and older. **CONTRAINDICATIONS:** Known hypersensitivity to any of the ingredients in Kaletra, co-administration with astemizole, terfenadine, flonase, midazolam, triazolam, ergotamine, dihydroergotamine, ergometrine, methylethergometrine, cisapride, St John's Wort (*Hypericum perforatum*), lovastatin, simvastatin, salmeterol, pimozone or sildenafil (for the treatment of high blood pressure in the vessels in the lung), severe hepatic impairment. **PRECAUTIONS:** New onset and exacerbation of diabetes mellitus, hyperglycaemia, use in mild to moderate hepatic impairment, fat redistribution, hyperlipidaemia, increased risk of pancreatitis, immune reconstitution syndrome, PR interval prolongation, Pregnancy: Cat B3. Due to the potential for HIV transmission and serious adverse reactions in nursing infants, mothers should be instructed not to breast feed whilst on Kaletra. **ADVERSE EFFECTS:** Mild to moderate diarrhoea; nausea; lipodystrophy; abdominal pain; asthenia; abnormal stools; headache; dyspepsia; vomiting; rash; abdomen enlarged; hypercholesterolaemia; hyperlipidaemia; increased liver enzymes; hyperglycaemia; hyperuricaemia. See full PI. **INTERACTIONS:** Co-administration with drugs and herbal products primarily metabolised by CYP3A (dihydropyridine calcium channel blockers, immunosuppressants and erectile dysfunction agents), or are inducers or inhibitors of CYP3A (anticonvulsants, corticosteroids, antifungals and rifamycins). Other drugs include fentanyl, antiarrhythmics (digoxin, amiodarone, systemic lignocaine and quinidine), anticancer agents (dasatinib, nilotinib, vincristine, and vinblastine), antidepressants (trazodone and bupropion), disulfiram, metronidazole, warfarin, methadone and oral and patch contraceptives. Other anti-HIV medications including other protease inhibitors. **DOSAGE AND ADMINISTRATION: Kaletra Tablets** Tablets may be taken with or without food and should be swallowed whole and not chewed, broken or crushed. **Dosage: 200 mg lopinavir/50 mg ritonavir tablets** Adults and children ≥ 35 kg two tablets twice daily. Kaletra tablets may also be administered as four tablets once daily in adult patients with less than three lopinavir associated mutations. Kaletra should not be taken once daily with efavirenz, nevirapine, nelfinavir, amprenavir, carbamazepine, phenobarbital and phenytoin. **100 mg lopinavir/25 mg ritonavir tablets** Children < 45 kg dosage is based on body weight. (See full PI for dosing guidelines). **Kaletra Oral Solution (80 mg lopinavir/20 mg ritonavir per mL) Dosage:** Adults: 5 mL of oral solution (400/100 mg) twice daily taken with food. Kaletra oral solution may also be administered as 10 mL once daily in adult patients with less than three lopinavir associated mutations. Kaletra should not be taken once daily with efavirenz, nevirapine, nelfinavir, amprenavir, carbamazepine, phenobarbital and phenytoin. Children: 2 years and older 230/57.5 mg/m² (or 12/3 mg/kg for children < 15 kg or 10/2.5 mg/kg for children ≥ 15 kg) twice daily taken with food, up to a maximum dose of 400/100 mg (5 mL) twice daily. With concomitant nevirapine or efavirenz, should consider increasing dosage to 300/75 mg/m² (or 13/3.25 mg/kg for children < 15 kg or 11/2.75 mg/kg for children ≥ 15 kg) twice daily taken with food. (See full PI for dosing guidelines). **DATE OF PREPARATION:** 21 September 2010 Version 09. **PBS Dispensed Price:** \$685.00. **REFERENCE:** 1. Kaletra Product Information v1.1. © Registered Trademark. KAL160-0910-1. THA KAL148



PBS Information: Private hospital authority required. Treatment, in combination with 2 or more other antiretroviral drugs, of HIV infection in patients with CD4 cell counts of $< 500/\text{mm}^3$, or viral load $> 10,000$ copies/mL.



ashm
Australasian HIV/AIDS Conference 2010
22nd Annual Conference of the Australasian Society for HIV Medicine
Sydney, 20-22 October 2010

Wednesday 20 - Friday 22 October 2010
Sydney Convention and Exhibition Centre, Darling Harbour, Sydney

**FULL CONFERENCE
PROGRAM**

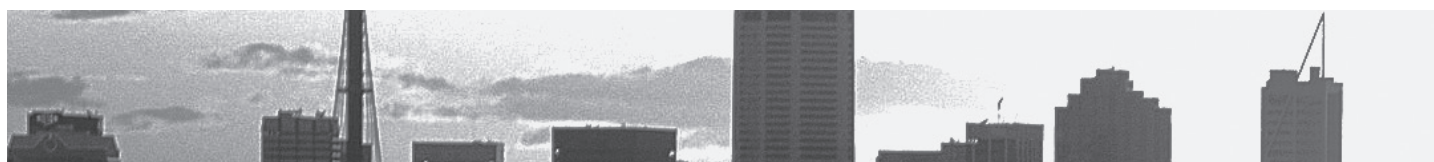
WEDNESDAY 20 OCTOBER	
7.00am	Registration
7.30am - 9.00am	Sexual Health Trainee Case Presentation Breakfast Bayside Gallery B Chair: Fraser Drummond Panel: Frank Bowden, Lewis Marshall and Lynne Wray
7.30am - 8.00am	Khaw C - "Why am I deaf, doc?" - An interesting case of syphilis and HIV co-infection
8.00am - 8.30am	Bopage R - Recurrent vulval ulcerations following urti: Case of lipschutz ulcers
8.30am - 9.00am	Collins K - A Trifecta
8.30am - 10.00am	HIV/AIDS Conference Opening Ceremony and Joint Conference Plenary Bayside Auditorium A Chairs: Greg Dore & Sean Emery
8.30am - 8.35am	Welcome to the Land, Allen Madden, Cultural Education Representative, Metropolitan Local Aboriginal Land Council, NSW, Australia
8.35am - 8.40am	Welcome by ASHM President, Professor Greg Dore, Viral Hepatitis Clinical Research Program, National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney; Infectious Diseases Physician, St Vincent's Hospital, Sydney, NSW Australia
8.40am - 8.45am	Welcome by Government Representative
8.45am - 8.50am	Welcome by Kerry Chant, Public Health Physician, Chief Health Officer for NSW and Deputy Director-General, Population Health, NSW Department of Health, Sydney, NSW, Australia
8.50am - 8.55am	Welcome by Don Baxter, Executive Director, Australian Federation of AIDS Organisation, Sydney, NSW, Australia
8.55am - 9.00am	Welcome by Robert Mitchell, President, NAPWA, Sydney, NSW, Australia
9.00am - 9.05am	Welcome by the Conference Convenor, Sean Emery, National Centre in HIV Epidemiology & Clinical Research, NSW, Australia

9.05am - 9.30am	Calvin Cohen, Research Director, Community Research Initiative of New England and Clinical Instructor, Harvard Medical School, Boston, United States of America State of ART therapy, new drugs & new treatment issues					
9.30am - 10.00am	Graham Hart, Head of Research Department, Director, Centre for Sexual Health & HIV Research, University College London, United Kingdom Can HIV treatment stop the AIDS epidemic?					
10.00am - 11.00am	Morning Tea in Exhibition and Poster Area, Bayside Grand Hall					
10.00am - 11.00am	Ngarra Exhibition, Bayside 103 & 104					
10.10am - 10.50am	NCHECR Surveillance Launch, Bayside Gallery A					
11.00am - 12.30pm	Joint Symposium: Instant Desire	11.00am - 12.30pm	Joint Symposium: Desirable Men	11.00am - 12.30pm	HIV/AIDS Conference Theme D : Integrating International and National Policies and Programs Bayside Gallery A	
	Bayside Auditorium A					Bayside Gallery B
	Chairs: Fraser Drummond and Rebecca Guy					Chairs: Garrett Prestage and David Templeton
11.00am - 11.20am	David Anderson, Deputy Director and Head, Business Development of the Burnet Institute NHMRC SRF, VIC, Australia STI point of care tests: Performance and how they are used in developed and developing countries	11.00am - 11.20am	David Wilson, Associate Professor, Head, Surveillance and Evaluation Program for Public Health, National Centre in HIV Epidemiology & Clinical Research , NSW, Australia STI Modelling and Syphilis Modelling	11.00am - 11.15am	Alan Whiteside, Director and Professor, Health Economics and HIV/AIDS Research Division (HEARD), University of KwaZulu-Natal, Durban, South Africa Looking to the future: Learning from the Past	
11.20am - 11.40am	Philip Cunningham, Senior Scientist and Operations Manager, NSW State Reference Laboratory, St Vincent's, NSW, Australia HIV point of care tests: Performance, how they are used in developed and developing countries, regulatory perspective	11.20am - 11.40am	Chris Bourne, Head, NSW STI Programs Unit, Sydney Sexual Health Centre, NSW, Australia Implementation of the National Gay Men's Syphilis Action Plan	11.15am - 11.30am	Mackay T - Integrating bilateral HIV assistance with national development budgeting and planning frameworks	

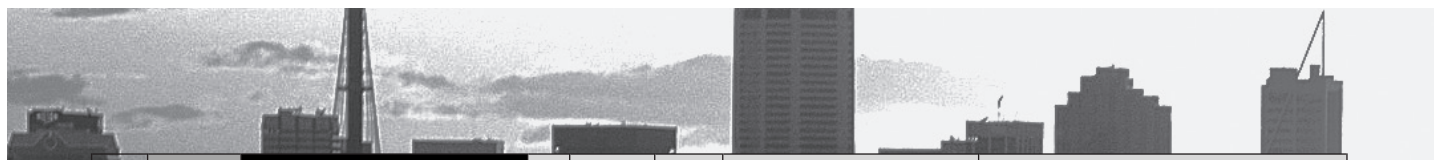


11.40am - 12.30pm	<p>Panel Presentations and Panel Discussion</p> <ul style="list-style-type: none"> • Kit Fairley, Director, Melbourne Sexual Health Centre, VIC, Australia • Philip Keen, Health Promotion Officer, Australian Federation of AIDS Organisations, NSW, Australia • Rae-Lin Huang, Nganampa Health Council, NT, Australia • Jane Hocking, Centre for Women's Health, Gender & Society, University of Melbourne, VIC, Australia • Phillip Cunningham • David Anderson 	11.40am - 12.00pm	<p>Joel Palefsky, Professor of Medicine, School of Medicine, University of California, San Francisco, United States of America</p> <p>HPV quadrivalent vaccine in prevention of anal dysplasia</p>	11.30am - 11.45am	<p>Nasir S - Socio-economic deprivation, local construct of masculinity and HIV-risk practices among young male injecting drug users in a slum area (lorong) in Makassar, Indonesia</p>
		12.00pm - 12.20pm	<p>John De Wit, Professor, Centre Director, National Centre in HIV Social Research, NSW, Australia</p> <p>Strengthening STI/HIV prevention - Promising new models of service delivery</p>	11.45am - 12.00pm	<p>Reis E - Queuing for money and queuing for drugs: Why are international HIV programs faltering?</p>
		12.20pm - 12.30pm	Discussion	12.15pm - 12.30pm	<p>Lemoh C - Experience of migration-related HIV screening among African-born Australians diagnosed with HIV</p>
	Lunch in Exhibition and Poster Area, Bayside Grand Hall				
12.30pm - 1.30pm	Ngarra Exhibition, Bayside 103 & 104				
	ASHM AGM, Bayside Gallery A				
1.30pm - 3.00pm	<p>Joint Symposium: Aboriginal and Torres Strait Islander Health</p> <p>Bayside Auditorium A</p> <p>Chairs: Cathy Pell</p>	1.30pm - 3.00pm	<p>Joint Symposium : Political, Cultural and Logistic Realities of Microbicides for Australasia and the Pacific</p> <p>Bayside Gallery B</p> <p>Chairs: Jim Pickett and Bill Bowtell</p>	1.30pm - 3.00pm	<p>HIV/AIDS Conference Theme B Offered Paper Session: Adherence, Treatment and Workforce Issues</p> <p>Bayside Gallery A</p> <p>Chairs: Jo Watson</p>
1.30pm - 1.40pm	<p>Simon Graham, Research Manager, Aboriginal and Torres Strait Islander Health Program, National Centre in HIV Epidemiology & Clinical Research, NSW, Australia</p> <p>Trends of Chlamydia and Gonorrhoea in the Aboriginal and Torres Strait Islander Population, 2001-2009</p>	1.30pm - 1.48pm	<p>John Kaldor, Professor, National Centre in HIV Epidemiology and Clinical Research, NSW, Australia</p> <p>Recent microbicide clinical trials and trials expected to report in the near future</p>	1.30pm - 1.45pm	<p>Paxton S - Challenges to women's lifelong access to ARVs</p>

1.40pm - 1.50pm	<p>Jan Savage, Senior Policy Officer, Australasian Society for HIV Medicine, VIC, Australia</p> <p>Review of the evidence for the effectiveness and cultural acceptability of sexual and reproductive health programs for Aboriginal adolescents in NSW</p>	1.48pm - 2.06pm	<p>Dr Christopher McConville, Senior Lecturer In Pharmacutics, Curtin University, WA, Australia</p> <p>Antiretroviral based microbicides and vaginal rings</p>	1.45pm - 2.00pm	<p>Ankus J - Collaboration for Health in Papua New Guinea (CHPNG) - Australasian Society for HIV Medicine (ASHM) Clinical mentoring program</p>
1.50pm - 2.00pm	<p>James Ward, Program Head, Senior Lecturer, Aboriginal and Torres Strait Islander Health Program, National Centre in HIV Epidemiology & Clinical Research, NSW, Australia</p> <p>Understanding epidemiology of Chlamydia related to Aboriginal and Torres Strait Islander People: First results from the ACCESS network project</p>				
2.00pm - 2.10pm	<p>Rebecca Guy, Senior Lecturer, National Centre HIV Epidemiology & Clinical Research, NSW, Australia</p> <p>A good news story in Aboriginal and Torres Strait Islander health: Is it possible to eliminate syphilis?</p>	2.06pm - 2.18pm	<p>Patricia Fagan, Public Health Physician, Sexual Health, Cairns Public Health Unit, QLD, Australia</p> <p>Political cultural and logistic realities of microbicides for Australasia and the Pacific - a perspective from the Torres Strait</p>	2.00pm - 2.15pm	<p>Tran D - Barriers to antiretroviral treatment in the North Vietnam</p>
2.10pm - 2.20pm	<p>Richard Chenhall, Lecturer, Medical Anthropology, Centre for Health and Society, Melbourne School of Population Health, University of Melbourne, VIC, Australia</p> <p>"Our lives": Socio-cultural influences on the sexual health of Indigenous young people.</p>	2.18pm - 2.30pm	<p>Andrew Vallely, Associate Professor, National Centre in HIV Epidemiology and Clinical Research, NSW, Australia</p> <p>The acceptability of vaginal microbicides in Papua New Guinea: results of a qualitative study among men and women attending an STI clinic in Port Moresby</p>	2.15pm - 2.30pm	<p>Wheeler E - One year on: Interim findings from the "GP mentoring at the time of HIV diagnosis" project</p>
2.20pm - 2.30pm	<p>David Wilson, Associate Professor, Head, Surveillance and Evaluation Program for Public Health, National Centre in HIV Epidemiology & Clinical Research, NSW, Australia</p> <p>Using mathematical modelling to predict HIV incident cases among Aboriginal and Torres Strait Islander people who inject drugs</p>	2.30pm - 2.42pm	<p>Annmarie O'Keefe, AM, Research Fellow, Lowy Institute for International Policy, NSW, Australia</p> <p>HIV and Microbicides: hindrance or help in addressing gender inequality in the Pacific</p>	2.30pm - 2.45pm	<p>Taing K - Moving from viral suppression to whole patient care: An audit of the clinical management of HIV positive patients in a Queensland clinic.</p>



2.30pm - 2.40pm	James Ward, Program Head, Senior Lecturer, Aboriginal and Torres Strait Islander Health Program, National Centre in HIV Epidemiology & Clinical Research, NSW, Australia Trends in newly diagnosed HIV infection in the Aboriginal and Torres Strait Islander and Non-Indigenous populations, 1992 – 2008	2.42pm - 3.00pm	Panel Discussion: Jim Pickett, Andrew Vallely, John Kaldor, Christopher McConville, Trish Fagan and Annmaree O'Keefe	2.45pm - 3.00pm	Discussion
2.40pm - 3.00pm	Discussion				
3.00pm - 3.30pm	Ngarra Exhibition, Bayside 103 & 104				
	Afternoon Tea in Exhibition and Poster Area, Bayside Grand Hall				
	Sexual Health Conference Closing and Joint Conference Debate				
3.30pm - 5.00pm	Bayside Auditorium A				
	Chairs: Andrew Grulich and Anne Robertson				
3.30pm - 4.30pm	Debate: This house believes that STI control should be a priority of HIV prevention programmes For: Catriona Bradshaw, Sexual Health Physician, Melbourne Sexual Health Centre, VIC, Australia Graham Hart, Head of Research Department, Director, Centre for Sexual Health & HIV Research, University College London, United Kingdom Against: Basil Donovan, Professor Sexual Health, Head, Sexual Health Program, National Centre in HIV Epidemiology and Clinical Research, NSW, Australia Jim Pickett, Director, AIDS Foundation of Chicago, United States of America				
4.30pm - 4.45pm	Prize Presentations and Closing Remarks by Dr Anne Robertson, President, Australasian Chapter of Sexual Health Medicine				
4.45pm - 4.50pm	ASHHNA Nurse Prize Presentations by Donna Tilley, President, ASHNA and Clinical Nurse Consultant, Sydney Sexual Health Centre, NSW, Australia				
4.50pm - 5.00pm	Presentation of next year's conference by Frank Bowden and Sarah Martin, Committee Convenors of the 2011 Australasian Sexual Health Conference Committee				
5.15pm - 5.45pm	ASHHNA Annual Meeting, Bayside 102				
7.00pm - 11.00pm	Sexual Health Conference Dinner at Luna Park 6.30pm Ferry Departure from Darling Harbour				



THURSDAY 21 OCTOBER			
7.00am	Registration		
		7.00am - 8.35am	<p>SPONSORED SATELLITE SYMPOSIUM: Sponsored by Gilead A new era – Evidence and choice Guidelines: What are they good for?</p> <p>Bayside Gallery B</p> <p>Chair: Andrew Carr</p> <p>Arrival Breakfast</p> <p>Andrew Carr, Professor, St Vincent's Hospital, Sydney, NSW, Australia Evidence and choice – a new era</p> <p>David Cooper, Director, National Centre in HIV Epidemiology and Clinical Research, NSW, Australia What was the Panel thinking? Why certain ART regimens are recommended as preferred</p>

	7.45am - 8.05am	Calvin Cohen, Research Director, Community Research Initiative of New England and Clinical Instructor, Harvard Medical School, Boston, USA Finding the right fit: alternative and acceptable preferred first-line regimens
	8.05am - 8.20am	Mark Bloch, Director, Holdsworth House, Sydney, NSW, Australia What are we actually doing? Australian physician adherence to 'what to start' ART guidelines
	8.20am - 8.30am	Panel Discussion
	8.30am - 8.35am	Meeting summary & close

11.15am - 11.30am	Carr A - Reduced arterial stiffness and framingham cardiovascular risk score after switching from Abacavir to Tenofovir in men at high cardiovascular risk	11.15am - 11.30am	Bourne C - SMS reminders increase HIV/STI re-testing rates among men who have sex with men at Sydney Sexual Health Centre	11.15am - 11.30am	Stephen Kent, Head, HIV Vaccine Laboratory, NHMRC Research Fellow, Department of Microbiology and Immunology, University of Melbourne, VIC, Australia Immune escape from HIV-specific ADCC pressure	11.15am - 11.30am	Luker V - Hypotheticals for PNG: Concurrence and the significance of female-to-male transmission	11.15am - 11.30am	Dr Nafsiah Mboi, Secretary, National AIDS Commission, Indonesia Progress and challenges towards achieving Universal Access in Indonesia
11.30am - 11.45am	Puls R - Anthropometric and metabolic outcomes in a 48 week randomized, open-label study of three different combination antiretroviral regimens as initial therapy for HIV infection	11.30am - 11.45am	McGrath P - Self-based rationales are important for volunteers in HIV research	11.30am - 11.45am	Patricia Price, Professor, School of Pathology and Laboratory Medicine, University of Western Australia, WA, Australia The incidence, causes and pathogenesis of immune restoration disease manifested as liver enzyme elevation in HIV-HCV co-infected patients in Indonesia	11.30am - 11.45am	Kelly A - Bipo ART mi dai man em mi stap: [before ART i was a dead man]: Wellbeing of people on antiretroviral therapy in Papua New Guinea	11.30am - 11.45am	Heather Worth, International HIV Research Group, University of New South Wales, NSW, Australia HIV as a Crisis in Asia and Pacific: what is the evidence?
11.45am - 12.00pm	Trevillyan J - Predictors of coronary heart disease in HIV positive patients	11.45am - 12.00pm	Stroove M - Infectious syphilis is associated with increased risk of HIV seroconversion in men who have sex with men in Victoria	11.45am - 12.00pm	John Zaunder, Senior Scientist, St Vincent's Centre for Applied Medical Research, St Vincent's Hospital, NSW, Australia Identification, isolation and expansion of antigen specific CD4 T lymphocytes	11.45am - 12.00pm	Shrestha S - I am physically well but still not happy from inside: A study on antiretroviral therapy among the people injecting drugs (PIDS)	11.45am - 12.00pm	Rico Gustav, Treatment Advocacy and Capacity Building Officer, Asia Pacific Network of People with HIV/AIDS (APN+), Bangkok, Thailand PLHIV keeping governments accountable for Universal Access targets

12.00pm - 12.15pm	Price J - Traditional and HIV-related factors of vitamin D insufficiency in Melbourne	12.00pm - 12.15pm	Jin F - Per-contact probability of HIV transmission in homosexual men in Sydney in the era of HAART	12.00pm - 12.15pm	Damian Purcell, Reader in Virology, University of Melbourne, VIC, Australia Potential for bovine colostrum derived neutralizing antibodies to HIV Env gp140 in an HIV microbicide	12.00pm - 12.30pm	Discussion	12.00pm - 12.15pm	Discussion
12.15pm - 12.30pm	Nolan D - Assessing and managing cardiovascular risk and smoking in the Royal Perth Hospital HIV cohort	12.15pm - 12.30pm	Jansson J - Evaluating and forecasting the medical outcomes and geographical distribution of people living with HIV in Australia	12.15pm - 12.30pm	Stuart Turville, Research Fellow, Group Leader, Westmead Millennium Institute, University of Sydney, NSW, Australia Endocytosis as a HIV therapeutic target: Dynamin 2 & HIV entry			12.15pm - 12.30pm	
12.40pm - 1.25pm	Theme B Oral Posters: Co-morbidities and Clinical Monitoring			Theme C Oral Posters: HIV Prevention Issues in Gay Men			Theme D Oral Posters: Stigma and Affected Populations		
	Bayside Gallery B Chair: Kathy Petoumenos			Bayside 103 Chair: Daniel Madeddu				Bayside 104 Chair: TBC	
	Benjamin O - Interferon-gamma and IL-5 production correlate directly in HIV patients co-infected with Mycobacterium Tuberculosis with or without immune restoration disease Carey D - Lipid profiles in HIV-infected adults receiving Atazanavir and Atazanavir/Ritonavir in randomised trials: Systematic review and meta-analysis of randomised controlled data Puls R - Two patterns of cerebral metabolite abnormalities are detected on proton magnetic resonance spectroscopy in HIV+ subjects electively commencing art Pett S - Considerations in the rationale, design and methods of the strategic timing of antiretroviral treatment (start) trial McGertigan B - Association between low 25(oh) vitamin D levels, anti-retroviral therapy and metabolic profile in a cohort of treated and therapy naive HIV positive patients in Western Australia Richards D - Clinical audit of physician adherence to national guideline recommendations for cardiovascular disease (cvd) and renal disease screening and risk factor management.			Murray J - Ageing and current antiretroviral levels are insufficient to reduce the number of people living with HIV in Australia for the foreseeable future McDonald A - Use of the bed assay for describing trends in incident HIV infection in Sydney, 2005 - 2009 El-Hayek C - Does using a bed capture enzyme immunoassay test enhance current HIV surveillance practices? Pedrana A - Sexual risk behaviour and knowledge of HIV status among a sample of gay men in Australia. Pierce A - NPEP patients testing positive for HIV at baseline visit and during follow up period				Purwani S - Creating accessible services for idus at community clinics in East Java Morrison E - Harm reduction in an ideal world: Users perspective Hazarka I - Risk factors for HIV-1 infection in India: Evidence from the National Family Health Survey 3 Grimwood A - An evaluation of the impact of a community based adherence support programme on ART outcomes in selected government HIV Riskiyani S - Household support and quality life of people living with HIV and TB	
12.30pm - 1.30pm	Lunch in Exhibition and Poster Area, Bayside Grand Hall								

1.30pm - 3.00pm	Theme B: Resistance, Co-infection and Complications of HIV and its Treatment	1.30pm - 3.00pm	Theme D Symposium: The Dialogue between Social Science, Public Health and Medicine	1.30pm - 3.00pm	Theme C: Emerging Issues in HIV prevention in Australia	1.30pm - 3.00pm	Theme A: Molecular Virology	1.30pm - 3.00pm	SPONSORED SATELLITE SYMPOSIUM by Department of Health and Ageing Young People and Youth Participation – A prerequisite for effective HIV and STI prevention
	Bayside Auditorium A		Bayside Gallery B		Bayside Gallery A		Bayside 103		Bayside 104
	Chairs: Kate Cherry and Emanuel Vlahakis		Facilitator: David Wilson		Chairs: Trish Langdon and Gary Dowsett		Chairs: Stuart Turville and John Zaunders		Chairs: Department of Health and Ageing Representative
1.30pm - 1.45pm	Gooley M - Temporal changes in the prevalence of HIV drug resistance mutations and the influence of antiretroviral drug prescribing habits.	1.30pm - 1.40pm	John Kaldor, Professor, National Centre in HIV Epidemiology and Clinical Research, NSW, Australia Interdisciplinary research on HIV prevention: A work in progress	1.30pm - 1.45pm	Brown G - I was not some young tourist: acquisition of HIV among Australian men while travelling and working overseas		Suzuki K - Sequence specific induction of HIV-1 transcriptional gene silencing targeting NF-kB sequences by siRNA without any off-target effects of other NF-kB driven genes	1.30pm - 1.35pm	Alischa Ross - CEO, YEAH, National HIV Strategy EWGRG Youth Representative, VIC, Australia Introduction
1.45pm - 2.00pm	Shalaka N - The characteristics of HIV-positive adults with and without diagnoses of malignancy attending three HIV clinics in Sydney, Australia	1.40pm - 1.50pm	Susan Kippax, PhD, FASSA Professorial Research Fellow Social Policy Research Centre University of New South Wales, NSW, Australia Negotiating Biomedicine: Accommodation or Resistance	1.45pm - 2.00pm	Castley A - Shifting molecular epidemiology of the HIV-1 epidemic in Western Australia over the last decade			1.35pm - 1.55pm	Alischa Ross - CEO, YEAH, National HIV Strategy EWGRG Youth Representative, VIC, Australia Focusing on prioritising Young People - the Sixth National HIV Strategy, the Second National STI Strategy & The National STI Prevention Program

2.00pm - 2.15pm	Puls R - Choice of combination antiretroviral therapy (CART) alters changes in cerebral function testing after 48 weeks in treatment, HIV infected subjects commencing CART: a randomised controlled study	1.50pm - 2.00pm	Roger Garsia, Head Division of Medicine Royal Prince Alfred Hospital and Area Director HIV/AIDS Sydney South West Area Health Service, NSW, Australia Integrating evidence in medical and social sciences	2.00pm - 2.15pm	McMahon T - A review of evidence to guide targeted approaches to HIV/AIDS prevention among immigrants in high-income countries	2.00pm - 2.15pm	Hood C - Promoter-targeted siRNA localises with Argonaute 1 and 2 during RNA-induced transcriptional gene silencing of retroviral infections	1.55pm - 2.20pm	Kat Byron - Agents of YEAH Program Manager, YEAH, VIC, Australia Agents of YEAH - Youth HIV/AIDS and Sexual Health Peer Education and Leadership Program
2.15pm - 2.30pm	Whitfield W -The cutaneous manifestations of the immune reconstitution inflammatory syndrome (IRIS) associated with HIV infection	2.00pm - 2.15pm	TBC	2.15pm - 2.30pm	Cherry C - The effects of exercise training on metabolic and morphological outcomes for people living with HIV: a systematic review of randomised controlled trials	2.15pm - 2.30pm	Tschochner M - Characterisation of Hepatitis C virus evolution in HIV/HCV coinfecting individuals using deep sequencing technology: Relevance for new antiviral drugs and disease outcome	2.20pm - 2.20pm	Ilana Cooper - YEAH, VIC, Australia Red Aware - The Power of Youth-led HIV/STI Public Awareness Campaigns
2.30pm - 2.45pm	Cysique L - New biomarkers for neurocognitive impairment in older and clinically stable HIV+ individuals	2.15pm - 3.00pm	Discussion	2.30pm - 2.45pm	Sawleshwarkar S - HIV testing in general practice	2.30pm - 2.45pm	La J - Targeting HIV-1 reverse transcriptase using fragment screening	2.20pm - 3.00pm	Facilitated Question and Answer Facilitated by: Alischa Ross
2.45pm - 3.00pm	Limsreng S - The impact of Hepatitis C co-infection with HIV/AIDS in comparing with the mono infection HIV/AIDS in the program Esther, Calmette hospital			2.45pm - 3.00pm	Discussion	2.45pm - 3.00pm	Ebrahimi D - Have apobec3G/F left an evolutionary footprint on HIV-1 genome?		
3.00pm - 3.30pm	Afternoon Tea in Exhibition and Poster Area, Bayside Grand Hall								

3.30pm - 5.00pm	Theme B Symposium: Clinical Management of HIV in Ageing Population	3.30pm - 5.00pm	Theme D: Stigma and Discrimination	3.30pm - 5.00pm	Theme C: Regional Issues in HIV Prevention	3.30pm - 5.00pm	Theme A: Pathogenesis and Immunology	3.30pm - 5.00pm	SPONSORED SATELLITE SYMPOSIUM by Department of Health, Victoria A new dawn? - Victoria's response to troubled times
	Bayside Auditorium A	Bayside Gallery B			Bayside Gallery A		Bayside 103	Bayside 104	
	Chairs: Jo Watson and Alan Street	Chairs: Martin Holt			Chairs: John Kaldor and Agnes Mek		Chairs: Steve Kent and Miles Davenport	Chairs: Garrett Prestage and Graham Brown	
3.30pm - 3.45pm	David Menadue, NAPWA and Board Member, Victorian AIDS Council/Gay Men's Health Centre, VIC, Australia Community perspective on HIV and aging	Larasati A - Lawyer, shadow lawyer, and law student: Working together, erasing stigma	Sauk J - Intravaginal hygiene and menstrual practices: Implications for HIV/STI prevention and future microbicide acceptability in Papua New Guinea	Mark Feinberg, Vice President, Medical Affairs, Merck Vaccines and Infectious Diseases, United States of America How do natural hosts for AIDS viruses and other zoonotic infections remain healthy?: Implications for the pathogenesis and treatment of HIV infection.	Brent Allan, Manager, Viral Hepatitis & Sexual Health, Department of Health, Victoria Introduction	3.30pm - 3.40pm	3.30pm - 3.40pm	3.30pm - 3.40pm	
3.45pm - 4.00pm	Edwina Wright, Specialist, Alfred Hospital, Burnet Institute and Faculty of Medicine, Nursing and Health Sciences Monash University, VIC, Australia Current scientific research and clinical thinking about ageing and HIV	Russell J - Transactions of social supports with healthcare providers within the personal networks of women living with HIV in Australia	MacLaren D & Tommbe R - Researching male circumcision for HIV prevention: Lessons from a pilot study at a university in Papua New Guinea			3.30pm - 4.00pm			Stoovè M - The effectiveness of social marketing campaigns in changing HIV/STI-related behaviour among gay men in Australia
4.00pm - 4.15pm	Andrew Grulich, Head, HIV Epidemiology And Prevention Program, National Centre in HIV Epidemiology and Clinical Research, NSW, Australia Cancer Prevention in people with HIV	Choo M - Negotiating positive living: A 10 country study on issues facing HIV-positive MSM in the Asia Pacific	Kapul M - More than a cut: Acceptability of male circumcision for HIV prevention in Papua New Guinea			4.00pm - 4.15pm			Sepulveda C - Working with sexually adventurous men

4.15pm - 4.30pm	Jenny Hoy, Director Victorian HIV Service Unit, Alfred Hospital, Melbourne, VIC, Australia HIV and Ageing: Should we worry about the bones?	4.15pm - 4.30pm	Adam P - Stigma and subjective norms strongly influence young people's decision to test for STIs including HIV	4.15pm - 4.30pm	Manopitboon C -Evaluation of a peer outreach program to reduce HIV risks among men who have sex with men (MSM) in Thailand	4.15pm - 4.30pm	McBride K - Majority of HIV DNA in the HIV reservoir located in the non-gut homing resting memory CD4+ Tcell subset	4.10pm - 4.25pm	Pedrana A - Where have all the men gone? Reaching gay men for sexual health promotion via social networking sites with iterative evaluation methods
4.30pm - 4.45pm	Andrew Carr, Head, HIV, Immunology and Infectious Diseases Unit and Head, Clinical Research Program, St Vincent's Hospital, Sydney; St Vincent's Hospital, VIC, Australia Cardiovascular health	4.30pm - 4.45pm	Sandy L - Sex work, HIV interventions and the sexual order in Cambodia	4.30pm - 4.45pm	Januraga P - An increase in HIV prevalence among female sex workers in Bali; an alarming situation for an epidemic to general population	4.30pm - 4.45pm	Affandi J - Can immune-related genotypes illuminate the immunopathogenesis of CMV disease in HIV patients?	4.25pm - 4.40pm	Rogers M - Improving the effectiveness of partnerships for the prevention of blood- borne viruses
4.45pm - 5.00pm	Discussion	4.45pm - 5.00pm	Worth H - Violence and harassment against sex workers in Fiji and the effect on HIV prevention	4.45pm - 5.00pm	Discussion	4.45pm - 5.00pm	Sasson S - Progressive activation of CD127+132- recent thymic emigrants into terminally differentiated CD127- 132+ T-cells in HIV-1 infection	4.40pm - 5.00pm	Discussion
TEST and TREAT is an evaluable, applicable and relevant prevention strategy in our region?									
Sponsored by Boehringer Ingelheim and NSW Health. Conference Debate accompanied by drinks and canapes Doltone House, Darling Island Wharf Chair: Professor David Cooper									
5.30pm - 7.30pm	<p>Team One Dr. Calvin Cohen, Research Director, Community Research Initiative of New England and Clinical Instructor, Harvard Medical School, Boston, USA Sean Slavin, Assistant Director (Research Programs), NAPWA, NSW, Australia Elizabeth Dax, Associate Professor</p> <p>Team Two Alan Whiteside, Director and Professor, Health Economics and HIV/AIDS Research Division (HEARD), University of KwaZulu-Natal, Durban, South Africa Bridget Haire, Senior Policy Analyst, Family Planning NSW and PhD candidate, Centre for Values, Ethics and the Law in Medicine (VELIM), University of Sydney, NSW, Australia Andrew Grulich, Head, HIV Epidemiology and Prevention Program, National Centre in HIV Epidemiology and Clinical Research, NSW, Australia</p>								

FRIDAY 22 OCTOBER			
7.00am	Registration		
7.00am - 8.45am	Case Presentation Breakfast; Sponsored by Gilead, Janssen and MSD	7.30am - 8.30am	SPONSORED SATELLITE SYMPOSIUM by Department of Health and Ageing The Research Policy and Evaluation Working Group of MACBBVS: Discussing the application of research to policy and practice
	Bayside Gallery A & B		Bayside 103
	Chairs: Mark Thomas and Mark Boyd		Moderator: Carla Treloar
7.30am - 7.45am	Kanhutu K - Castleman's disease in a man with recent HIV seroconversion: treatment with Rituximab	7.30am - 7.40am	Introduction
7.45am - 8.00am	Trevillyan J - When one isn't enough: Successful treatment of concurrent HIV and EBV encephalopathy		
8.00am - 8.15am	Varma R - Focal segmental glomerulosclerosis in a man with long term non-progressive HIV infection with end stage renal failure: Challenging treatment decisions	7.40am - 8.10am	Discussion: How organisations become aware of, access and use research
8.15am - 8.30am	Bopage R - Unusual fragility fractures in chronic HIV infection	8.10am - 8.40am	Discussion: What mechanisms would assist organisations in using research more/better
8.30am - 8.45am	Discussion	8.40am - 8.50am	Next steps
9.00am - 10.30am	Challenges for Treatment...Resistance, Resources and the Mind Plenary		
	Bayside Auditorium A		
	Chairs: Jeff Post and Gary Dowsett		
9.00am - 9.30am	Paul Cameron, Clinical Immunologist, Immunology Department, Alfred Hospital and Monash University Immunology Department, VIC, Australia Chemokines and HIV latency in resting T cells		
9.30am - 10.00am	Alan Whiteside, Director and Professor, Health Economics and HIV/AIDS Research Division (HEARD), University of KwaZulu-Natal, Durban, South Africa Rolling out ARV in Resource Poor Areas: What are the Real Challenges?		
10.00am - 10.30am	Edwina Wright, Specialist, Alfred Hospital, Burnet Institute and Faculty of Medicine, Nursing and Health Sciences Monash University, VIC, Australia. What's on your mind? - HIV and the Brain		
10.30am - 11.00am	Morning Tea in Exhibition and Poster Area, Bayside Grand Hall		

FRIDAY 22 OCTOBER 2010

FULL CONFERENCE PROGRAM

11.00am - 1.00pm	Australian Antiretroviral Guidelines Session	11.00am - 1.00pm	Theme C: Issues in HIV Prevention in Gay Men 2	11.00am - 1.00pm	Theme D: Social and Cultural Aspects of HIV	11.00am - 1.00pm	Theme A: Translational Research	11.00am - 1.00pm	SPONSORED SATELLITE SYMPOSIUM by Beyond Blue Understanding and responding to alcohol and other drug use in gay men with depression in general practice: A consultation workshop
	Bayside Auditorium A		Bayside Gallery B		Bayside Gallery A		Bayside 103		Bayside 104
	Chairs: Michele Giles & Fraser Drummond		Chairs: Nic Parkhill and Andrew Grulich		Chairs: Heather Worth and Patrick Rawstorne		Chairs: David Anderson and Phillip Cunningham		Chairs: Susan Kippax
11.00am - 11.30am	Eric Daar, Chief, Division of HIV Medicine, Harbor-UCLA Medical Center; Professor, David Geffen School of Medicine, UCLA, Los Angeles, United States of America When to start - Watch out for the pendulum	11.00am - 11.15am	Down I - What would gay men be prepared to do to reduce rates of HIV?	11.00am - 11.15am	Sergeant J - A changing epidemic? HIV and Sub-Saharan Africans in Australia	11.00am - 11.15am	Keane N - HIV-1 adaptation to early HLA-restricted immune responses in acute heterosexual transmission	11.00am - 11.15am	Deborah Saltman AM, General Practitioner and Pro-Vice Chancellor, Arts and Sciences at Southern Cross University, NSW, Australia Key findings from the Primary Health Care Project on HIV and Depression
		11.15am - 11.30am	Gray R - Which public health strategies will likely have the greatest impact in reducing HIV incidence among gay men in NSW?	11.15am - 11.30am	Fu X - Sexual networks and HIV among money boys in Northeast of China	11.15am - 11.30am	Price P - Plasma levels of IL-18, sCD14 and CXCL2, CXCL8 and CXCL10 in tubercular immune restoration disease in a north India population	11.15am - 11.30am	Dr Christy Newman, Senior Research Fellow at the National Centre in HIV Social Research, NSW, Australia Comparing 'doctor' and 'patient' assumptions about the role of illicit drug use in gay men's depression
11.30am - 11.40am	Questions	11.30am - 11.45am	Bradley J - Rapid HIV testing: What we want, and when we want it	11.30am - 11.45am	Prestage G - Disclosing HIV status to casual partners	11.30am - 11.45am	Wilson K - Validation of a rapid testing algorithm for confirming HIV infection in the Pacific region	11.30am - 11.45am	Martin Holt, Senior Research Fellow, National Centre in HIV Social Research The role of alcohol and illicit drugs in depression among gay men attending general practice

11.40am - 12.10pm	Matthew Law, Head Biostatistics, National Centre in HIV Epidemiology and Clinical Research When to start - Interpreting cohort studies - a guide for the non-expert	11.45am - 12.00pm	Bavinton B - Gay men's community- based HIV prevention peer education -What is the evidence for our work?	11.45am - 12.00pm	Millard T - The experience of living with HIV for heterosexual men in Australia	11.45am - 12.00pm	Papadakis A - Low HIV viral load results at the time of primary HIV infection are likely to be specific		11.45am - 12.00pm	Joanne Bryant, Research Fellow, National Centre in HIV Social Research, NSW, Australia Is the level of concordance between 'doctor' and 'patient' assessments of depression undermined by gay men's drug and alcohol use?
12.10pm - 12.20pm	Questions	12.00pm - 12.15pm	Triffitt K - HIV prevention in 2010: Comparison of two campaigns	12.00pm - 12.15pm	Yassmina P - Empowering prisoners in health through complementary approach	12.00pm - 12.15pm	Yan C - Dried blood spots represent a convenient alternative specimen to plasma for HIV drug resistance genotyping and subtyping in resource- limited settings		12.00pm - 1.00pm	Discussion
12.20pm - 12.50pm	Eric Daar What to Start - How to refine the choice	12.15pm - 12.30pm	Zablotska I - Australian gay men never tested for HIV	12.15pm - 12.30pm	Burdon R -Improving pediatric adherence and retention in HIV care and treatment programs: the Vietnam experience	12.15pm - 12.30pm	Chibo D - Prevalence of onward transmission and associated transmitted drug resistance in patients with primary HIV infection in Victoria, Australia			
12.50pm - 1.00pm	Questions	12.30pm - 12.45pm	El-Hayek C - Trends in testing and positivity for sexually transmitted infections among men who have sex with men	12.30pm - 12.45pm	Burke J - Swahili concepts: Keys to understanding responses to HIV	12.30pm - 12.45pm	Thapa L -Extrapulmonary tuberculosis in HIV/AIDS: fire under the ash			

Theme B Oral Posters: Adherence, Workforce and Diagnosis		Theme C Oral Posters: HIV Prevention Issues in the Region			
1.10pm - 1.55pm	Bayside Gallery B Chairs: Stephen Kerr	Bayside 103 Chairs: David Wilson and Mark Stoove			
	Achhra A - The clinical significance of CD4+ t-cell counts in Asian and Caucasian HIV-infected populations: results from TAHOD and AHOD Schneider K - Economic evaluation of monitoring virologic responses to antiretroviral therapy in HIV-infected children in resource-limited settings Blair D - Expediting in-country HIV confirmatory testing in Pacific Island countries and territories Nguyen D - Building regional capacity for HIV care and treatment through short course training, Australia Aitchison S - Alerting the physician: lipid screening in a HIV population	Valley A - A longitudinal clinical pilot study among men and women attending a sexual health clinic in Mt Hagen, Papua New Guinea Ryan C - Molecular analysis of HIV-1 subtype C in Papua New Guinea Zhang L - Chinese investment in needle and syringe programs yield substantial health and financial return Zou H - Should internet and voluntary counseling and testing facilitated active HIV testing services for men who have sex with men be scaled up in China? Burke J - Infant feeding networks and HIV prevention in East Africa			
1.00pm - 2.00pm	Lunch in Exhibition and Poster Area, Bayside Grand Hall				
2.00pm	Exhibition Closes				
2.00pm - 3.30pm	Theme C Symposium: Health Promotion - Turning Theory Into Practice	Theme B: Treatment and Monitoring - Clinical Studies	Theme B: HIV in Diverse Populations	Theme D: IDU, Risk and Harm Reduction in Indonesia	SPONSORED SATELLITE SYMPOSIUM by ASHM and the HIV Consortium Supported by AusAID Addressing the Needs and Exploring the Responses of Affected Communities to HIV in PNG and the Pacific.
	Bayside Auditorium A	Bayside Gallery B	Bayside Gallery A	Bayside 103	Bayside Auditorium A
	Facilitator: Graham Brown	Chairs: John Chuah and Janaki Amin	Chairs: Rob Lake and Jeanne Ellard	Chairs: Edward Reis and Kemal Siregar	Chairs: TBC
	Dean Murphy, Education and Health Promotion Officer, Australian Federation of Aids Organisation, NSW, Australia	Kelly M - Antiretroviral therapy intensification with raltegravir or anti-lipopolysaccharide immunoglobulin from hyper-immune bovine colostrum in antiretroviral-treated patients exhibiting a suboptimal CD4+T-cell response: The Coral Study	Craig L - Crock L - Beyond the grim reaper preparing aged care services for people living with HIV	Subronto Y - IDU service and utilities among women injecting drug users in 3 cities in Yogyakarta and central Java province	Sauk J - Addressing the needs of most-at-risk populations in the HIV epidemic in Papua New Guinea

2.15pm - 2.30pm	Colin Batrouney, Manager, Health Promotion, Victorian AIDS Council/Gay Men's Health Centre, VIC, Australia From intervention to engagement: How do we make health promotion relevant to gay men?	2.15pm - 2.30pm	Kariminia A - Survival of HIV-infected children: A cohort study from the Asia- Pacific region	2.15pm - 2.30pm	Fitzgerald L - Social isolation for people living with HIV/ AIDS in South East Queensland: Determinants and consequences	2.15pm - 2.30pm	Hartanti A - Mentoring : A way to accelerate HIV harm reduction response for prisoners in Java and Bali, Indonesia	2.15pm - 2.30pm	Lahui D - Friends Frangipani: The sex worker response to HIV in Papua New Guinea
2.30pm - 2.45pm	Sean Slavin, Assistant Director (Research Programs), NAPWA, NSW, Australia Integrating scientific knowledge and lived experience: the meaning of evidence and the role of theory in health promotion for people living with HIV	2.30pm - 2.45pm	Zhou J - Trend of CD4 cell count in HIV-infected patients with HIV viral load monitoring while on combination antiretroviral treatment: results from the Treat Asia HIV Observational Database (TAHOD)	2.30pm - 2.45pm	Lemoh C - What we want to know: Information sought by African Australians living with HIV	2.30pm - 2.45pm	Nugrahani R - Risky practices associated with HIV/AIDS in Gunung Sari prison, Makassar, Indonesia	2.30pm - 2.45pm	Evera N- Rising to the challenge of involving positive sex workers and men who have sex with men in Papua New Guinea
2.45pm - 3.00pm	Tadgh McMahon, Manager, Multicultural HIV/ AIDS and Hepatitis C Service NSW, NSW, Australia Through the lens of cultural competency: health promotion practice among people from culturally and linguistically diverse backgrounds	2.45pm - 3.00pm	Law M - Trends in detectable viral load by calendar year in the Australian HIV observational database	2.45pm - 3.00pm	Grierson J - Ageing with HIV: Health and wellbeing cohort effects for those over 40	2.45pm - 3.00pm	Lazuardi E - Female IDUs and the role of male partners and friends in central Java, Indonesia	2.45pm - 3.00pm	Rawstorne P - Key findings from a behavioural survey of men who have sex with men and akavaine in Rarotonga and Situtaki, the Cook Islands



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Australasian HIV/AIDS Conference 2010

22nd Annual Conference of the Australasian Society for HIV Medicine
Sydney, 20-22 October 2010

Wednesday 20 - Friday 22 October 2010
Sydney Convention and Exhibition Centre, Darling Harbour, Sydney

**ORAL PRESENTATION
ABSTRACTS
WEDNESDAY 20 OCTOBER 2010**

Point of Care Testing: 11.00am - 12.30pm

Point of care (POC) tests have enormous potential to impact the detection, treatment and prevention of STIs in both developed, and especially developing countries. In particular, the appropriate use of POC tests can enable timely interventions for patients in areas that do not have access to laboratory facilities, and prevent loss to follow-up (and interventions where appropriate) for patients in all areas.

However, uncertainty about test performance and clinical feasibility are major impediments to the effective use of POC tests for a wide range of infectious diseases, including most STIs.

It is obvious that the performance of POC tests should be evaluated in comparison to agreed "gold standard" diagnostic tests, but this is complicated by the lack of access to suitable specimens/panels and testing sites, and the absence of agreed protocols for performance evaluation. As a result, performance data for most commercially available tests is limited to small numbers of "convenient" clinical samples, without consideration of field performance and acceptability to clinicians. The lack of consistent, validated specimen panels also prevents meaningful comparison between published or claimed performance for tests from different manufacturers.

This presentation will discuss issues that impact on the performance, lab- and field-evaluation, and end use of POC tests for STIs such as Chlamydia, gonorrhea, and trichomonas, but with particular reference to our ongoing work to identify (or develop) suitable POC tests to support improved control of syphilis infection, especially in the settings of high endemicity and neonatal syphilis.

**Paper Number: 914
STI POC TESTS: PERFORMANCE
AND HOW THEY ARE USED IN
DEVELOPED AND DEVELOPING
COUNTRIES**

David Anderson¹; Mary Garcia¹;
Jocelyn Diaz¹; Simone van de
Waarsenburg¹; Lisa Natoli¹; Claire
Ryan^{1,2}; Peter Siba²; Rebecca Guy³;
John Kaldor³; Jessica Rotty⁴

¹Burnet Institute, Melbourne, VIC; ²Papua New Guinea Institute of Medical Research, Goroka, PNG; ³National Centre in HIV Epidemiology & Clinical Research, Sydney, NSW; ⁴Health Protection Branch, Department of Health, Melbourne, VIC



MSM Issues: 11.00am - 12.30pm

**Paper Number: 821
IMPLEMENTATION OF THE
NATIONAL GAY MEN'S SYPHILIS
ACTION PLAN**

Bourne C^{1,2}

¹NSW STI Programs Unit and Sydney Sexual Health Centre, Sydney Hospital, Sydney, NSW
²School of Public Health and Community Medicine, University of NSW, Kensington, NSW

Increasing rates of syphilis amongst gay men in several Australian jurisdictions lead to the development of a National Gay Men's Syphilis Action Plan in 2009. The Plan was guided by mathematical modelling of the expected impact of some public health interventions (behaviour change, chemoprophylaxis, mass treatment, targeted screening and treatment, partner notification and follow up), complimentary social research about the acceptability of these interventions, a technical workshop and summaries of current Australian and international public health responses to syphilis. The Plan aims for a sustained reduction in infectious syphilis by 2013 with the recommendations for testing [routine quarterly syphilis testing with HIV + immune monitoring (90% coverage), >20 partners/6mth at least 6mth testing (90% coverage)]; partner notification [(75% regular and 10% casual partners) enhance patient-, clinician-, centrally-led approaches]; health promotion [increased STI testing and partner notification messages to gay men as above, retain focus on sustaining condom use]; and monitoring and evaluation [surveillance and studies to collect appropriate data].

Implementation of the plan has included revision of MSM STI/HIV testing guidelines; communication to GPs, S100 providers and HIV services about the Plan; triaging MSM into public sexual health services; investigating GPs reminder systems for testing; GP practise nurse training; investigating & overcoming regulatory barriers to STI testing including who can order tests and how; exploring alternative testing locations and methods including rapid, point of care syphilis tests; incorporating and supporting contact tracing in routine clinical care with revised national and state guidelines; community communications about the Plan and recommendations including condom reinforcement; enhanced public health notification procedures and coordinating existing and new systems for evaluation.

**PAPER NUMBER: 826
HPV QUADRIVALENT VACCINE
IN THE PREVENTION OF ANAL
DYSPLASIA**

Palefsky J

University of California

Like cervical cancer, anal cancer is strongly associated with HPV infection. Men who have sex with men (MSM) have the highest incidence of anal cancer in the population, particularly those who are HIV-seropositive. Among the latter, the incidence has not declined since the introduction of antiretroviral therapy and may instead be increasing as they live longer. Anal cancer is preceded by high-grade anal intraepithelial neoplasia (AIN 2+). Currently there is no routine AIN screening and treatment program to prevent anal cancer, similar to the CIN screening program to prevent cervical cancer.

In the Merck 020 trial, 598 MSM aged 16-26 years were randomized to receive quadrivalent HPV (HPV 6/11/16/18) vaccine or placebo at enrollment, month 2, and month 6. Efficacy analyses were performed in a per-protocol population (seronegative at day 1 and DNA-negative from day 1 through month 7 to the relevant vaccine HPV type). Median follow-up was 2.5 years (post-dose 3). Vaccine efficacy against HPV 6/11/16/18-related AIN in MSM was 77.5% (95% CI: 39.6, 93.3) (5 vaccine cases versus 24 placebo cases). Efficacy against AIN1 was 73% (95% CI: 16.3, 93.4), and efficacy against anal warts was 100% (95% CI: 8.2,100). Efficacy against AIN 2+ was 74.9% (95% CI: 8.8, 95.4).

These results demonstrate that the quadrivalent HPV vaccine is efficacious in preventing AIN including AIN 2+ related to HPV 6/11/16/18 in MSM naïve to vaccine HPV types at enrollment. HPV vaccination may be an important tool for anal cancer prevention among at-risk individuals.



HIV/AIDS Conference Theme D : Integrating International and National Policies and Programs: 11.00am - 12.30pm

Australia provides bilateral assistance to the HIV response in Indonesia; it has also funded several other initiatives including GFATM, UN system and international NGOs Australia has committed itself to more effective delivery of aid through signing the Paris Declaration and the Jakarta Commitment regarding aid effectiveness and delivery. These commit aid agencies to deliver more aid via national and government systems and ensure aid is integrated into national development frameworks. The commitment of both the Indonesian and Australian governments to the Millennium Development Goals (MDGs) is a demonstration of the need to ensure a high level of national ownership and guidance of key development programming.

Key question: To what extent has the bilateral assistance program for HIV contributed to progress in meeting national economic and development goals?

Response: Strengthening a response to HIV in any country aims to reduce numbers of people being infected with HIV; in this way international assistance arguably contributes to reducing morbidity and mortality, protecting overall productivity of a workforce, and stronger health and social welfare systems. From a contrary perspective, international financial and technical assistance is sometimes criticized as relieving national institutions of their responsibility for managing and funding their own programs and allowing them to divert scarce resources to other less valuable programs; an additional criticism is that the availability of international assistance delays local commitment to building sustainable financial and institutional responses to HIV.

In Indonesia Australia recognizes these issues and has adapted the bilateral program to respond in varying ways. These include providing initial support for urgent responses when national authorities could not pay for or deliver the programs and services required; and maintaining support during periods when the national situation is stabilizing but ensuring that assistance is complementary to, and supportive of, national and local program planning and financing. This has only been achievable since the Indonesian government has given higher priority to addressing the MDGs as part of its positioning as a key player in global affairs. The assistance provided by Australia has also engaged with strengthening the relationship between government and civil society.

In the case of Indonesia, it is arguable that Australia's assistance to support the response to HIV has contributed to the national development agenda.

Few studies have investigated the association of socio-economic deprivation, local construct of masculinities and HIV-risk practices among young people in Indonesia. This study aims to fill the gap and explore the social, cultural and economic contexts of HIV-risk practices among young male injecting drug users in a slum area, commonly named lorong, in the city of Makassar, South Sulawesi, Indonesia. HIV-risk practices are defined as risky injecting practices including the sharing of needles and other injecting equipment and unsafe sexual practices such as having multiple sexual partners and low level of condoms use. Employing qualitative approach, in-depth interviews were conducted with 21 young men (aged between 15-24 years) who were recruited in several hanging out spots in the lorong as well as participant observation aimed to document the lived experience of young male drug injectors in this locality. The interviews and participant observation revealed the crucial role of socio-economic deprivation in the lorong (particularly rampant unemployment among young men) and rewa (a local construct of masculinity) in stimulating young men in this locale to be engaged in risky drug use and drug injecting practice as well as unsafe sexual practices that render them vulnerable to HIV infection. Furthermore, the risk of HIV among young male drug injectors in this locality should not be viewed in isolation but should be seen in its intersection with other risks experienced by these young men. I argue that to be more effective, the individualization of risk that characterize the existing harm reduction programs in Makassar need to be complemented with broader community based programs that address socio-economic deprivation in the lorong. Additionally, harm reduction programs for male drug injectors in the lorong should be cognizant to the cultural and structural constraints hindering them to apply safer drug injecting and safer sexual practices.

**Paper Number: 808
INTEGRATING BILATERAL HIV
ASSISTANCE WITH NATIONAL
DEVELOPMENT BUDGETING AND
PLANNING FRAMEWORKS**

Mackay, T.¹ Reis, E.²

¹HIV Cooperation Program for Indonesia; ²Australasian Society for HIV Medicine

**Paper Number: 77
SOCIO-ECONOMIC
DEPRIVATION, LOCAL
CONSTRUCT OF MASCULINITY
AND HIV-RISK PRACTICES
AMONG YOUNG MALE
INJECTING DRUG USERS IN
A SLUM AREA (LORONG) IN
MAKASSAR, INDONESIA**

Nasir S

Hasanuddin University, Indonesia
(Lecturer)
The University of Melbourne,
Australia (Ph.D Candidate)



HIV/AIDS Conference Theme D : Integrating International and National Policies and Programs: 11.00am - 12.30pm

Paper Number: 169
QUEUING FOR MONEY AND
QUEUING FOR DRUGS: WHY ARE
INTERNATIONAL HIV PROGRAMS
FALTERING?

Reis EJ

Australasian Society for HIV
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Global Health Initiatives (GHI) have become the dominant force in multilateral HIV/AIDS programs and have driven an agenda, or espoused a rhetoric, of coordination and locating HIV/AIDS assistance into development frameworks. The current and emerging crisis of faltering funding support and treatment availability for HIV programs in resource limited countries requires that we ask whether such agendas have been adhered to and effective.

The Global Fund for AIDS, Tuberculosis and Malaria (GFATM) has been called "the most successful innovation in foreign assistance in the past decade"; PepFar and other GHI have been credited with bringing HIV treatment to literally millions of people who would otherwise not have been able to access these and died. Yet, it is now the case that countries with the highest HIV epidemics are queuing for funds to maintain, much less expand, their national programs, and people who are both on HIV treatment and those waiting for it are queuing up for drugs to stay alive.

How has the international HIV response come to this predicament a mere 8 years since the GFATM was launched and wealthy western countries pledged the necessary fund to support effective programs? Why is this occurring at the same time as the benefits of investing in international HIV support are becoming more evident?

This paper reviews recent research findings on both aid effectiveness and the impacts of GHI on national HIV/AIDS programs. It will consider what sustainability means in international development policy and what needs to change to ensure that funds for HIV programs are committed and effective and that treatment access continue to expand.

Paper Number: 567
EXPERIENCE OF MIGRATION-
RELATED HIV SCREENING
AMONG AFRICAN-BORN
AUSTRALIANS DIAGNOSED WITH
HIV

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Migrants from Africa, like other individuals applying for permanent residency in Australia, must pass a health requirement. This includes an HIV screening test for both onshore and offshore adult applicants. Most HIV-positive applicants are initially refused a visa, although some are eventually granted residency. The issue of migration and HIV remains a sensitive political subject. This study explored the role of migration-related HIV screening in the diagnosis of African-born Australians living with HIV.

A case series of African-born adults living with HIV in Victoria was conducted. Data was collected in semi- structured interviews. Interview transcripts were analysed thematically to explore events leading to the diagnosis of HIV, focusing on the experience of HIV screening tests during the process of migration to Australia.

Fourteen men and six women were interviewed. Ten were born in the Horn of Africa. Five were diagnosed during migration HIV screening (three in Australia and two in New Zealand); all felt well at the time. Eight had previously tested negative during migration HIV screening (all outside Australia). Participants experienced migration-related HIV screening as a coercive process and received little information or emotional support prior to testing. Some participants accepted the positive migration HIV test as an opportunity to maintain good health and protect their families. Previous negative migration HIV screening tests had little influence on events leading to the first positive HIV test.

HIV screening of people applying for residence in Australia provides an opportunity for diagnosis of HIV in asymptomatic individuals, but provision of pre- and post-test information and support is inconsistent, causing avoidable distress for those individuals with HIV diagnosed during this process. Migrants to Australia with negative HIV screening tests remain at risk of HIV infection.

Symposia Session: Indigenous Health: 1.30pm - 3.00pm

Aim: To present a trend analysis of chlamydia and gonorrhoea notifications in the Indigenous population between 2001-2009.

Methods: We analysed trends of gonorrhoea and chlamydia in the period 2001-2009 by; notifications, age standardised rates, age, gender, geographical location and Indigenous status in jurisdictions where accurate and complete data (greater than 50%) were available.

Results: Between 2001 and 2008, chlamydia and gonorrhoea notifications increased for both the Indigenous and non-Indigenous populations, 67% and 300% for chlamydia and 29% and 13% for gonorrhoea respectively. In 2008, the rate in Indigenous Australians was substantially greater than for the non-Indigenous population, 4 times greater for chlamydia and 39 times greater for gonorrhoea. The female to male ratio of gonorrhoea in the Indigenous population suggests mainly heterosexual transmission with 1.1 for females and 1 for males. However in the non-Indigenous population the rate of females is 1 to 0.29 males, which suggests predominantly homosexual transmission. In Australia, 81 % of chlamydia diagnoses and 67% of gonorrhoea diagnoses are found in those 29 years or less. This is consistent for chlamydia notifications in the Indigenous and non-Indigenous populations, but a greater proportion (78%) of gonorrhoea diagnoses were made in those aged 29 years or less. However, the highest rate of gonorrhoea notification in the Indigenous population was in young women aged 15 – 19 years whereas for the non-Indigenous population it was in men aged 20-29 years. The Indigenous population resident in remote and very remote locations had higher rates of chlamydia and gonorrhoea infection than those in urban areas.

Conclusion: Rates of chlamydia and gonorrhoea have increased for both the Indigenous and non-Indigenous populations. Our analysis suggests chlamydia and gonorrhoea are more likely to affect young Indigenous men and women and those resident in remote areas.

To provide advice on the most effective programs to address sexual and reproductive health issues among Aboriginal adolescents in NSW.

This review considered the peer-reviewed scientific literature and citations, grey literature internationally and nationally. Documents were evaluated the level of evidence they provided: the level of methodological rigour, and sources and levels of bias – and thus validity and generalisability.

There is a lack of adequately evaluated international and national interventions in adolescent sexual and reproductive health and there is no high level evidence about Aboriginal adolescents in this area. Much of the literature sourced was descriptive comprising reports and case studies. No evidence was found about the socio-cultural aspects and meaning of adolescence and reproductive health in Aboriginal communities.

Review of the international literature identified program approaches and program characteristics associated with positive outcomes in sexual and reproductive health which may be applicable to Aboriginal adolescents. These include:

- School-based sex education
- Community based education, development and contraceptive services
- Development programs.
- commencing sex education before the onset of sexual activity (somewhat less strong)

Analyses of the successful programs identified characteristics to be adopted in program development. These address program principles and qualities, content and delivery. The approach to program development and consultation in Aboriginal communities is discussed.

Recommendations were presented to NSW Health. They emphasise the importance of working with the Education Department to develop, modify, implement and evaluate pilot or ongoing school based SR&H programs and with the health and community sectors, relevant youth and community government agencies to develop, modify, implement and evaluate pilot or ongoing community and youth development programs and continuing to build evidence.

The recommendations informed the framework which was developed by NSW Health for the NSW Aboriginal Sexual and Reproductive Health Program.

Paper Number: 769
TRENDS OF CHLAMYDIA
AND GONORRHOEA IN THE
ABORIGINAL AND TORRES
STRAIT ISLANDER POPULATION,
2001-2009

Graham S¹, Middleton M¹,
McDonald A¹, Ward J¹.
¹ National Centre in HIV
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Paper Number: 820
REVIEW OF THE EVIDENCE
FOR THE EFFECTIVENESS AND
CULTURAL ACCEPTABILITY OF
SEXUAL AND REPRODUCTIVE
HEALTH PROGRAMS FOR
ABORIGINAL ADOLESCENTS IN
NSW

Savage J

(for NSW Health, brokered by the
Sax Institute)

Symposia Session: Indigenous Health: 1.30pm – 3.00pm

Paper Number: 760
UNDERSTANDING
EPIDEMIOLOGY OF CHLAMYDIA
RELATED TO ABORIGINAL AND
TORRES STRAIT ISLANDER
PEOPLE: FIRST RESULTS FROM
THE ACCESS NETWORK PROJECT

Ward J¹, Goller J², Bergeri I², Kong F¹, Franklin N², Sullivan L³, Dimech W⁴, Kaldor Jm¹, Donovan B¹, Hellard M², Guy R.¹

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*on behalf of the ACCESS collaboration

Aboriginal and Torres Strait Islander people are identified as a priority population for STI control. Passive surveillance has demonstrated that in 2009 chlamydia notification rates were 6 fold greater in Aboriginal and Torres Strait people than non-Indigenous people. However passive surveillance is influenced by testing patterns and Indigenous status is incomplete in many jurisdictions. We report on Aboriginal and Torres Strait data from a new national chlamydia enhanced sentinel surveillance (ACCESS) system that aims to assist in the interpretation of passive surveillance trends.

Established in 2008, ACCESS is comprised of six separate sentinel surveillance networks across Australia: sexual health services (SHS), family planning clinics (FPC), antenatal clinics (ANC), Aboriginal Community Controlled Health Services (ACCHS), general practitioners (GP), and diagnostic laboratories (LAB). In total, 92 sentinel sites are participating and are geographically spread across Australia. We analysed chlamydia testing rates and positivity in Aboriginal and Torres Strait Islander people attending the sites in 2009.

In the 12 month of 2009, a total of 11,682 Aboriginal and Torres Strait Islander people attended ACCESS sites; 506 at one ANC, 1439 at 25 SHSs, 2185 at 27 GPs and 7552 at eight ACCHS. Overall 62% of for Aboriginal and Torres Strait Islander patients were female. Chlamydia testing rates for Aboriginal and Torres Strait Islander people varied between service provider networks; 3.95% at GPs, 17.7% at ACCHS, 62.8% at SHSs and 88.3% at one ANC. The corresponding chlamydia positivity rates at the network sites were 7.3% at GPs, 6.5% at ACCHSs, 14.8% at SHSs and 12.3% for ANCs.

ACCESS is a new surveillance system aimed at supplementing passive surveillance data and also provided important information to inform service provision planning. ACCESS has provided us with substantial information on chlamydia positivity and testing rates for Aboriginal people attending a range of different service provider settings. Over time it is anticipated that ACCESS will provide substantial new information regarding rates of chlamydia infection especially in jurisdictions where passive surveillance data is incomplete for Indigenous status.

Paper Number: 761
A GOOD NEWS STORY IN
ABORIGINAL AND TORRES
STRAIT ISLANDER HEALTH:
IS IT POSSIBLE TO ELIMINATE
SYPHILIS?

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To describe the recent epidemiology of infectious syphilis among Aboriginal and Torres Strait Islander communities and consider whether it may be possible to eliminate syphilis from this population.

The National Notifiable Diseases Surveillance System (NNDSS) has collected infectious syphilis data now for the last five years focusing on recent infections as opposed to all infections. As a result we now know that the numbers of notifications of infectious syphilis are finite and manageable, particularly in the context of geographical clusters and high rates of testing in remote areas.

In 2008 there were 183 notifications: with an age standardized rate of 34 per 100,000. 92% of these notifications were from Western Australia, Northern Territory and Queensland. The male to female ratio of these notifications was 1.07:1, suggesting the majority of infections are heterosexually acquired. While actual numbers of notifications are less than 200 the overall rate in Aboriginal and Torres Strait Islander communities remains 6 times higher than for non-Indigenous Australians and around 23 times higher in remote areas. The group most affected by infectious syphilis in Aboriginal communities is females aged 15-19 years residing in remote communities. The public health imperative of eliminating syphilis is strengthened by the high pregnancy rates in this age group.

Elimination of syphilis from Aboriginal and Torres Strait Islander communities is not an unrealistic goal. Syphilis meets three main criteria for elimination: (a) availability of effective treatment, (b) availability of reliable means to diagnose infection, and (c) the life-cycle of the organism is confined within the human host. Further, the absolute number of notified cases is less than 200 nationally and these cases are geographically concentrated. A precedent has been set with the elimination of Donovanosis - why can't we do it with syphilis?

Symposia Session: Indigenous Health: 1.30pm - 3.00pm

Indigenous people have been the target of many interventions to address poor sexual health. Despite being a priority group for health research, Indigenous youth continue to bear a significant burden of sexual ill health. International studies demonstrate the social and cultural particularity of young people's sexual health, and argue that a lack of contextual understanding has weakened the efficacy of interventions. Very little is known about how Indigenous young people negotiate relationships, define risk, and conceptualise their sexuality and sexual decision making within their expectations of life. Even less is known about the positive aspects of sexual relationships that young people experience and how their views are influenced by the culture and society in which they live. The "Our lives" project sets out to investigate sexual behaviour and sexual decision making in the context of the everyday life experience and aspirations of Indigenous young people under 25 in the NT, WA and SA. A key aspect of this research is the development of innovative qualitative methodologies to engage Indigenous youth in the research process. Body and risk mapping have played a central role in the preliminary phases of this project, alongside the development of Studio 34, a forum for promoting youth sexual health through the creation of media, music and arts by young people for young people. As there is strong community, government and non-government involvement, the resources developed can be shared across many sectors improving the likelihood of sustainable short and long-term benefits.

HIV risk factors and notifications are well understood for Australia's Indigenous population, and within this context injecting drug use (IDU) is an increasingly concerning risk factor for HIV transmission. Over the last 10 years the rate of HIV acquired through IDU has increased among Indigenous people, and is currently seven times the rate of non Indigenous peoples. This is of concern because epidemics around the world have escalated rapidly when widespread infection occurs in heterosexual populations and among injecting drug users.

We reviewed HIV epidemiological data, IDU demographic data and Needle Syringe Programs (NSP) access among Indigenous people, and incorporated these data into a mathematical transmission model in order to: (i) estimate the number of HIV infections that would have occurred in the absence of needle and syringe programs (NSPs); and (ii) forecast the expected number of HIV cases over the next 10 years according to current circumstances or if there is a change in injecting behaviour or access to NSPs.

The model shows us that an estimated 39 (0-140) HIV infections have been averted among Indigenous people due to NSPs over the last 10 years. If Indigenous people did not have access to NSP then it could be expected that rather than 3-4 IDU-related HIV transmissions per year, this population would experience up to an average of 231 incident cases per year. Similarly, if NSP coverage was to decrease by just 25% then annual incidence rates could increase by an expected 50-60%. If sharing of injecting equipment was to increase by 25% then projected incidence by 2019 would increase by ~31%; conversely, a 25% decrease in sharing of injecting equipment would result in a likely decrease in incidence by ~28% among Indigenous IDU.

This data highlights the importance of improving NSP access and coverage as well as targeted prevention messages for HIV and other BBV for this population.

Paper Number: 908

"OUR LIVES": SOCIO-CULTURAL INFLUENCES ON THE SEXUAL HEALTH OF INDIGENOUS YOUNG PEOPLE.

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Paper Number: 765

USING MATHEMATICAL MODELLING TO PREDICT HIV INCIDENT CASES AMONG ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE WHO INJECT DRUGS

Wilson D, Kwon A, Ward J.

National Centre in HIV Epidemiology and Clinical Research, UNSW, Sydney, Australia

Symposia Session: Indigenous Health: 1.30pm – 3.00pm

Paper Number: 787

TRENDS IN NEWLY DIAGNOSED HIV INFECTION AMONG ABORIGINAL AND TORRES STRAIT ISLANDER AND NON-INDIGENOUS PEOPLE IN AUSTRALIA, 1992 - 2008

Ward J¹, McDonald AM¹, Kaldor JM¹
on behalf of the National STI and
BBV Surveillance Committee

National Centre in HIV Epidemiology
and Clinical Research University of
NSW, Sydney

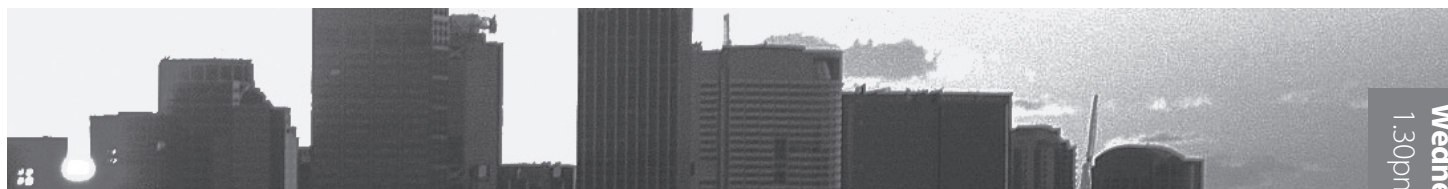
Indigenous peoples are exposed to a number of risk factors for HIV acquisition including high rates of STIs and injecting drug use (IDU), and poorer access to health services compared to the non-Indigenous population. National HIV surveillance data was analysed to compare the pattern of HIV infection in Australia, by Indigenous status.

Information on Indigenous status at HIV diagnosis was sought prospectively for cases newly diagnosed from January 1995 and retrospectively for cases diagnosed in 1992 – 1994. Exceptions to this were Victoria and ACT which commenced in 1998 and 2005 respectively.

Of 14 185 cases of HIV infection newly diagnosed in Australia in 1992 – 2008, 320 were identified as Indigenous, 13 001 as non-Indigenous, and a further 864 not reported for Indigenous status. Fewer than 10 cases of HIV have been diagnosed among Torres Strait Islander people in the period 1992-2008 with no cases in 2004-2008. The median age at HIV diagnosis was 32.1 for Indigenous cases vs. 36.4 and among Indigenous cases women accounted for 27% vs. 12% of non Indigenous cases. The rate of HIV diagnosis in the Indigenous population declined from 5.8 in 1992 – 1998 to 4.1 in 2004 – 2008, whereas the rate increased in the non-Indigenous population from 3.8 to 4.3 in the same periods. HIV transmission among Indigenous men who have sex with men (MSM) was relatively stable at 51% in 1992 – 2008. The percentage of HIV diagnoses among non-Indigenous MSM declined from 74% in 1992 – 1998 to 68% in 2004 – 2008. Indigenous cases attributed to heterosexual contact declined from 34% in 1992 – 1998 to 23% in 2004 – 2008 and increased from 14% in to 23% among non-Indigenous cases in the same periods. Among Indigenous cases, HIV infection attributed to IDU increased from 4% in 1992 – 1998 to 22% in 2004 – 2008, whereas cases among non-Indigenous remained stable at 3% in 1992 - 2008.

Long term trends indicate a similar population rate of newly diagnosed HIV infection by Indigenous status. The substantially higher percentage of Indigenous cases with a history of IDU, among younger people, women and heterosexual cases has implications for STI/BBV policy in Australia.





Symposium : Political, Cultural and Logistic Realities of Microbicides for Australasia and the Pacific: 1.30pm - 3.00pm

HIV acquisition remains a critical issue in the developing world with an estimated 7000 new infections daily world-wide. More than 60% of these infections are in women under the age of 25. Therefore, there is an urgent need to develop prevention methods that are safe, efficacious and acceptable, while allowing the at risk individuals to protect themselves from infection. In the absence of an effective vaccine a microbicide product would provide such an option. Currently antiretrovirals are being used to treat HIV infected patients in order to lower the viral load. However, recently they have been considered as potential microbicide candidates.

Tenofovir, an NRTI, is one of the leading antiretrovirals being evaluated as a possible microbicide candidate. A recent phase III clinical trial in South Africa found that a 1% Tenofovir gel was 39% effective in reducing a woman's risk of becoming infected with HIV during sex. Dapivirine is an NNRTI with high potency against HIV-1 (IC_{50} value of 0.9) that is also being evaluated as a potential microbicide candidate. A randomized, double-blind, phase 1 trial of a 0.05% Dapivirine gel, conducted in 36 healthy HIV-negative women and found the gel to be safe and well tolerated.

Intravaginal rings (IVRs) have been used to deliver drugs to the vagina and systemic circulation for a number of years. The three primary products available are Femring®, Estring®, and Nuvaring®. These products are used for either hormone replacement or contraception and are generally well accepted by women. The possibility of IVRs deliver one or more drugs (microbicide) over an extended period of time (e.g. months) is potentially useful in preventing HIV transmission. IVRs are torus shaped devices manufactured from elastomeric or thermoplastic materials. IVRs can be manufactured as either matrix or reservoir-type devices. Therefore IVRs offer the potential to provide continuous release of two or more antiretrovirals to the vagina over a period of 1 to 2 months, thus reducing compliance issues which are associated with microbicide gels.

Young people living in the Torres Strait are strikingly vulnerable to an HIV/AIDS outbreak. This vulnerability is evidenced by data indicating inadequate knowledge of sexually transmitted infections (STI) and HIV (especially HIV transmission), frequent risk behaviours and a low level of a sense of personal threat from either STI or HIV. These factors are compounded by deficient implementation of sex education in schools, poor access to condoms and to confidential sexual health services, persistently high prevalence/s of the common bacterial STI, and by the region's proximity to Papua New Guinea where a generalised HIV epidemic is now well established. In the main, the Torres Strait population and culture is religious and conservative and discussion of harm minimisation HIV prevention strategies, is confronting. This presentation will begin to explore local responses to the possibility of individually mediated prevention strategies, in the face of the potential for an established HIV epidemic.

**Paper Number: 829
Antiretroviral based microbicides
and vaginal rings**

[Mc Conville C](#)¹

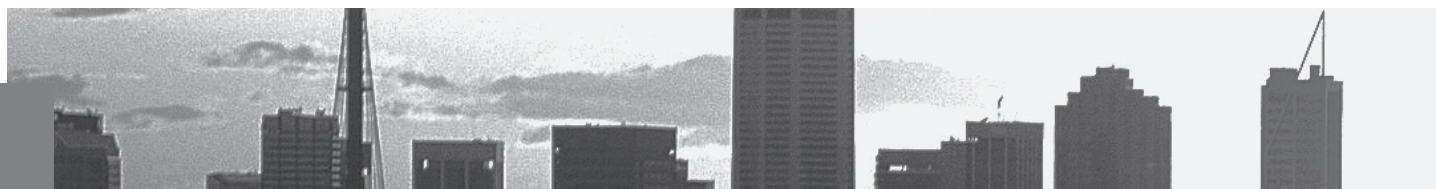
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**Paper Number: 830
POLITICAL CULTURAL
AND LOGISTIC REALITIES
OF MICROBICIDES FOR
AUSTRALASIA AND THE PACIFIC
- A PERSPECTIVE FROM THE
TORRES STRAIT**

[Fagan P](#)

Cairns Public Health Unit



Symposium : Political, Cultural and Logistic Realities of Microbicides for Australasia and the Pacific: 1.30pm - 3.00pm

Paper Number: 186
CHALLENGES TO WOMEN'S
LIFELONG ACCESS TO ARVS

Paxton S.

To examine the challenges to accessing HIV services for women in six Asian countries.

Twelve HIV-positive women from Cambodia, China, India, Indonesia, Thailand, Vietnam, were trained in qualitative and quantitative research methods.

Women designed a questionnaire and focus group discussion (FGD) guide and pilot tested the tools. Over 1,300 questionnaires were administered and 38 FGDs conducted.

Data was analysed using SPSS; FGDs were analysed thematically.

In all countries except China, a majority of women received post-test counselling.

Most women travel to their nearest HIV clinic at least once per month.

Women with positive children travel more often and further than other women.

Young women and women in urban areas had significantly easier access to antiretroviral medication (ARVs).

Most women said they had needed HIV services in the past six months but were not able to get access to them.

An ongoing and major challenge to women's access to ARVs is money for transport (79%).

One in two women faced discrimination within the public health system in the previous two years; older women, migrants and refugees were significantly more likely to face discrimination than others, including sex workers and drug users.

If ARV access is to be sustainable, clinicians need to prescribe more than one month's ARVs per visit once the client is stable. Two months at a time reduces transport costs by half, making it easier for women to raise cost of travelling to and from the clinic.



HIV/AIDS Conference Theme B Proffered Paper Session: Adherence, Treatment and Workforce Issues: 1.30pm - 3.00pm

Issues:

HIV prevalence rate in PNG is expected to rise from 1.61% in 2007, to 5.07% in 2012 (NDOH and NACS, 2007). The 2007 Estimate report on the HIV epidemic in Papua New Guinea identifies that faith based organisations accounted for 50% of ART sites but currently only cater for 8% of all patients on ARV, while only 38% of HIV positive people who need treatment are receiving it (UNAIDS/WHO, 2008). Increasing numbers of people testing HIV positive in PNG especially in rural areas and the need for HIV treatment access is placing strain on existing health care services. Health care workers need to be up skilled in HIV treatment care and support to meet the demands of the growing epidemic.

Description

The Collaboration for Health in PNG is a philanthropic initiative of six Australian based pharmaceutical companies (Boehringer-Ingelheim, Gilead, GlaxoSmithKline, Merck Sharp and Dohme, Pfizer and Tibotec) formed in 2002. In 2007 they funded the ASHM Clinical Mentoring Program 2008-2009. The program focuses on working with the PNG National Catholic Health Service in providing regular mentoring visits and training to staff at seven selected HIV treatment sites across PNG.

Lessons Learned

The Program was independently reviewed in late 2009. Findings show that the program is well regarded amongst clinical sites and stakeholders, has had a significant impact on health sites and has assisted in better clinical management of HIV positive people.

Conclusions from the review and program coordination indicate the importance of:

- Continuity and regularity of mentoring visits
- Confidence and cultural sensitivity of mentors
- Monitoring and evaluation strengthening
- Collaboration with the PNG National HIV Program

Next Steps

The Clinical Mentoring program has received further funding for another two years. This Program will focus on consolidating achievements and expanding services to a further two sites. The Program will also provide, for the first time, mentoring and training to public health services in PNG.

Paper Number: 291

**COLLABORATION FOR HEALTH
IN PAPUA NEW GUINEA (PNG)
– AUSTRALASIAN SOCIETY FOR
HIV MEDICINE (ASHM) CLINICAL
MENTORING PROGRAM**

Ankus JM¹, Reis E¹

¹ Australasian Society for HIV
Medicine, Sydney, NSW, Australia

HIV/AIDS Conference Theme B Proffered Paper Session: Adherence, Treatment and Workforce Issues: 1.30pm - 3.00pm

Paper Number: 200
BARRIERS TO ANTIRETROVIRAL TREATMENT IN THE NORTH VIETNAM

Tran Dam Anh¹, Christopher Doran¹,
Ngo Duc Anh², Louisa Degenhardt¹

¹National Drug and Alcohol Research Center; ²School of Population Health,

Since 2005, the Vietnamese government has been implementing highly active antiretroviral therapy for individuals infected with HIV. ARV drugs have been provided via three systems administered by Pepfar, World Bank, and the National Drug Program for free access through 206 outpatient clinics nationwide. However, only about 30% of HIV patients received treatment in 2009, far behind the goal of the National HIV Strategy to provide ARV to 70% AIDS patients by 2010. This qualitative study explores barriers to ARV treatment in Vietnam that may shed light on such low coverage.

The study was undertaken in 5 provinces (Hanoi, Hai Duong, Quang Ninh, Bac Kan, and Bac Giang), representing different geographical regions in northern Vietnam (urban, rural, and mountainous). Data was gathered from 5 clinics in 9 focus groups with HIV patients who are on ARV treatment, 13 in-depth interviews with doctors, and 15 in-depth interviews with non-ARV HIV patients.

Findings indicate that patients identified the fear of being known to have HIV positive as the biggest obstacle to the use of ARV clinics. Furthermore, limited knowledge in ARV, unstable living and working place, poverty, travel difficulties, and the lack of social support from family and community hinder patient efforts to access to the treatment. Providers reported that inconsistent patient management system among different ARV clinics, coupled with a shortage of qualified specialists, lack of facility and equipment, too complicated ARV distribution mechanism, and long waiting time before getting approval for free drugs comprise significant structural barriers to high coverage of ARV treatment in Vietnam. They also noted that social stigma attached to HIV/AIDS, inadequate media health education, poor patient supportive policy, weak coordination between relevant government authorities, and lack of linkage among different projects that provide HIV-related services are the core issues of poor ARV uptake.

To improve access to treatment, outpatient clinics need to be reorganized, operating in a consistent system, and provided with sufficient human resource, facilities and equipment. The Government should adopt the Supportive Program for HIV patients through a Health Insurance Scheme, and promote health education for HIV patients, particularly in remote areas.

HIV/AIDS Conference Theme B Proffered Paper Session: Adherence, Treatment and Workforce Issues: 1.30pm - 3.00pm

In New South Wales (NSW) and Western Australia (WA), a significant number of new HIV cases are diagnosed by general practitioners (GPs) who have limited or no experience in providing a new HIV diagnosis. This group also do not easily or proactively access support and information before delivering the new diagnosis.

The ASHM Mentoring at the Time of Diagnosis Project aims to support the GP through making a new diagnosis. Three HIV reference laboratories across NSW and WA act as a referral point, offering the mentoring service to low HIV case-load GPs, when notifying a positive HIV result. Support is then provided by experienced clinical advisors through a phone mentoring service supplemented with resources, before the patient is aware of the result. The project also aims to encourage GPs to consider a shared care relationship, to continue to care for the patient's general health and wellbeing, alongside tertiary specialist services.

Since commencement of the project in late 2009, 40 GPs have been mentored. The GPs were primarily located in metropolitan centres with 24 diagnosing HIV for the first time. The mentoring service almost always accessed the GP before the diagnosis was delivered to the patient. The most common reasons for GPs declining the mentoring service are that they have existing experience in giving an HIV diagnosis or that they have access to an experienced colleague for support.

Contact tracing and testing of contacts was the information most often requested by the newly diagnosing GPs. Other common requests included information about referral to tertiary providers and the GPs' role in the ongoing management of the patient. Encouragingly, 20 mentored GPs were interested in engaging in a shared care relationship.

Preliminary data indicate that inexperienced GPs are being reached and supported, by the clinical advisors, before the delivery of an HIV diagnosis.

A detailed independent evaluation of the project is being undertaken to review the impact of mentoring on the GPs' clinical practice and patient outcomes. The intention is to expand the project to include the remaining NSW reference laboratories.

With the development of highly active antiretroviral therapy (HAART), suppression of HIV and long term survival of HIV positive patients is expected in Australia today. The clinical challenge facing HIV clinicians today is to move from a model of care focussing on viral suppression to a chronic disease model in which co morbid conditions and risk factors are comprehensively assessed and managed to reduce rates of serious non AIDS related morbidity and mortality. The first step is assessment of the current standard of clinical care of HIV patients in Australia today.

HIV positive patients attending Clinic 87 at Nambour, QLD in 2009 were retrospectively studied. Parameters assessed in the audit included; a) HIV-specific parameters b) screening for co morbid infections including viral hepatitis, sexually transmitted infections and latent tuberculosis c) screening for non infectious co morbid conditions including; cardiovascular risk factors, renal disease, osteoporosis, psychiatric diagnoses and substance abuse, and d) health system delivery factors.

Of 180 HIV positive patients included in the audit, 88% patients were currently receiving HAART but 32% had a detectable HIV viral load in the 12 month audit period. Compliance was recorded as high, but side effects of HAART were only documented in 54% patients. Failure to attend clinic appointments was frequent (29% patients) and follow-up of failure to attend was not comprehensive.

This audit documented the rates of identified areas where improvements are required in the assessment and management of co morbid conditions. There were high rates of smoking (52%), hypertension (16%), and dyslipidaemia (17%). These risk factors were not assessed in all patients, and where detected were not modified in a significant proportion of patients. Significant rates of proteinuria (56%), and elevated blood glucose (15%) were recorded.

HIV positive patients require complex HIV-specific care, but also have high rates of co morbid conditions that are not comprehensively managed under the current clinical paradigm. There is an urgent need to develop clinical algorithms and care pathways to systematise detection and management of these conditions, and for audit and benchmarking between clinics to ensure high standards of HIV clinical care throughout Australia.

**Paper Number: 779
ONE YEAR ON: INTERIM
FINDINGS FROM THE 'GP
MENTORING AT THE TIME OF
HIV DIAGNOSIS' PROJECT**

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**Paper Number: 504
MOVING FROM VIRAL
SUPPRESSION TO WHOLE
PATIENT CARE:
AN AUDIT OF THE CLINICAL
MANAGEMENT OF HIV POSITIVE
PATIENTS IN A QUEENSLAND
CLINIC.**

Broom JK¹, Sowden D¹, Taing K²

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Sydney Convention and Exhibition Centre, Darling Harbour, Sydney

**ORAL PRESENTATION
ABSTRACTS
THURSDAY 21 OCTOBER 2010**

Theme B: Co-Morbidities: 11.00am – 12.30pm

To estimate the rates of cardiovascular disease (CVD) events after stopping smoking in patients with HIV-infection.

Patients who reported smoking status, and no previous CVD prior to enrolment into D:A:D were included. Smoking status is collected at each visit as current smoker (yes/no) and ever smoker (yes/no). Duration of stopping smoking was calculated for persons who had reported current smoking during follow-up and no current smoking subsequently. Endpoints were: myocardial infarction (MI); coronary heart disease (CHD – MI plus invasive coronary artery procedure or death from other CHD); CVD (CVD – CHD plus carotid artery endarterectomy or stroke); and all-cause mortality.

Event rates were calculated for never, previous and current smokers, and smokers who stopped during follow-up. Incidence rate ratios (IRR) were determined using Poisson regression adjusted for age, sex, cohort, calendar year, family history of CVD, diabetes, lipids, blood pressure and antiretroviral treatment.

27,136 patients had smoking status reported, with a total of 432, 600, 746 and 1902 MI, CHD, CVD and mortality events respectively. The adjusted IRR of CVD in patients who stopped smoking during follow-up decreased from 2.32 within the first year of stopping to 1.49 after 3+ years compared to those who never smoked. Similar trends were observed for the MI and CHD endpoints. Reductions in risk were less pronounced for all cause mortality.

The risk of CVD events in HIV-positive patients decreased with increasing time since stopping smoking. Smoking cessation efforts should be a priority in the management of HIV positive patients.

Paper Number: 188

RATES OF CARDIOVASCULAR DISEASE FOLLOWING SMOKING CESSATION IN PATIENTS WITH HIV INFECTION: RESULTS FROM THE D:A:D STUDY

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Current or recent, but not cumulative, abacavir use is associated in some cohorts and randomized trials with an approximate 2-fold increased risk of cardiovascular disease (CVD). Although abacavir increases cholesterol levels, the above 'on-off' association has led to the hypothesis that abacavir induces CVD through an acute proinflammatory or prothrombotic effect rather than any lipid effect. Abacavir is associated in vitro or cross-sectionally in vivo with increased platelet aggregation, increased neutrophil aggregation, and reduced endothelial function. Abacavir's effect on vascular function has not been studied prospectively or in patients with high CVD risk. Increased arterial stiffness is associated with CVD in the general population. In HIV+ adults, arterial stiffness may be increased in those receiving antiretroviral therapy and correlates with higher Framingham Risk score (FRS).

We recruited men with a 10-year risk of a myocardial infarction (Framingham risk score; FRS) >10%, normal renal function, and undetectable plasma HIV viral load > 6 months. We evaluated changes in arterial stiffness (augmentation index [Alx] by radial artery tonometry), FRS, traditional cardiovascular risk factors and cardiovascular biomarkers (d-dimer, C-reactive protein, interleukin-6) for 24 weeks after switching abacavir to tenofovir. Comparisons between time points were by repeated measures.

Abacavir was switched to tenofovir in 20 men (median 56 years, mean 10-year FRS 15% [SD 4], 5 with prior CVD); all but one switched abacavir-lamivudine to tenofovir-emtricitabine. No patient altered their antiretroviral, antihypertensive, anti-platelet, lipid-lowering or diabetic therapy on study; only 1 of 8 smokers stopped smoking (at week 12). After 4 weeks, mean Alx reduced from an elevated value of 22% by 4% (p=0.03) and Framingham risk score by 2% (p=0.01), which was driven by lower fasting total cholesterol (0.8 mmol/l; p=0.002). Consistent trends were observed through week 24. Changes in cardiac biomarkers were inconsistent and only occurred from week 12.

These non-randomized, pilot data suggest that switching from abacavir to tenofovir in patients with elevated FRS reduces arterial stiffness, a change that may be contributed to by reduction in total cholesterol rather than by an inflammatory or thrombotic mechanism. These findings should be evaluated in a randomized trial.

Paper Number: 207

REDUCED ARTERIAL STIFFNESS AND FRAMINGHAM CARDIOVASCULAR RISK SCORE AFTER SWITCHING FROM ABACAVIR TO TENOFOVIR IN MEN AT HIGH CARDIOVASCULAR RISK

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Theme B: Co-Morbidities: 11.00am – 12.30pm

Paper Number: 802
ANTHROPOMETRIC AND METABOLIC OUTCOMES IN A 48 WEEK RANDOMIZED, OPEN-LABEL STUDY OF THREE DIFFERENT COMBINATION ANTIRETROVIRAL REGIMENS AS INITIAL THERAPY FOR HIV INFECTION

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Altair is an open-label, multicentre study comparing regimens of combination antiretroviral therapy (ART) in treatment-naïve, HIV-infected subjects randomised to receive tenofovir/emtricitabine, combined with either efavirenz (Arm I), ritonavir-boosted atazanavir (Arm II) or zidovudine and abacavir (Arm III). Metabolic parameters and body composition were compared to assess treatment-related differences.

Eligible participants (n=322) were HIV-positive, ART-naïve, HLA B*5701-negative, with normal laboratory tests, plasma HIV-RNA $\geq 2,000$ copies/mL, CD4+ cells ≥ 50 cells/ μ L and no ART resistance. Fasting lipid and glycemic parameters were assessed. Dual energy x-ray absorptiometry (DEXA) and single slice computed tomography (CT) at the L4 vertebra were performed. The on-treatment population was analyzed; week 48 changes from baseline lipid/glycemic and anthropometric measures were formally compared using ANOVA methods, comparing Arm I with Arms II and III.

Treatment arms at baseline were similar for lipid and glycaemic parameters, and measures of body composition. Significant differences were shown with HDL, LDL, total cholesterol and glucose, for Arm III compared to Arm I in mean change from baseline to week 48.

From an overall baseline mean \pm SD of 16197 \pm 7863g, there was a significant loss of mean body fat on Arm III (-923 \pm 3206g, p=0.008 compared to Arm I) and corresponding gains in Arms I (830g) and II (1667g). There was a mean gain of total lean tissue (from overall baseline of 47316 \pm 10030g) in Arm III (479 \pm 2677g, p=0.014), compared to Arm I (-11.6g) and II (-460g). Peripheral fat increased in Arms I (145g) and II (562g), while there was a significant mean loss of peripheral fat in Arm III (-888 \pm 1716g, p=0.001).

There was no difference in mean change of BMI or visceral adipose tissue between treatments, although there was a significant decrease in subcutaneous adipose tissue from baseline (160 \pm 96.0cm²) in Arm III (-0.71cm², 0.36-30.0, p=0.042), compared to a gain in Arm I (14.5cm²).

Over 48 weeks, patients on quadruple nucleosides experienced significantly greater total and peripheral lipotrophy although consistently lower metabolic effects than patients receiving efavirenz. Treatment with ritonavir-boosted atazanavir may have resulted in less lipotrophy than efavirenz or the quadruple nucleosides. After adjustment for various factors, treatment remains an independent predictor of lipotrophy.

Paper Number: 560
PREDICTORS OF CORONARY HEART DISEASE IN HIV POSITIVE PATIENTS

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HIV positive patients have a 2-fold increased risk of myocardial infarction (MI) and coronary heart disease (CHD) compared with the non-HIV infected population. It is likely that traditional cardiac risk factors, the effects of antiretroviral medications and the direct actions of the HIV all play a role.

We performed a retrospective case-control study of HIV patients from January 1996 till December 2009 to evaluate the impact of HIV control, duration of HIV infection and antiretroviral exposure on the development of CHD. We also recorded the presence of traditional cardiovascular risk factors.

Cases (n=68) were HIV positive with evidence of CHD. The final analysis will be performed with 136 controls which are age- and sex-matched HIV positive patients, randomly selected from the patient database.

The prevalence of CHD in our cohort was 3.8%, with an incidence of 8.5 cases per 1000 patient years follow up. Preliminary analysis was performed on data collected from the first 68 control patients (1:1 matching) and demonstrated a statistically significant increase in the current use of, or past exposure to Abacavir among cases as compared with controls (OR: 2.28 and 2.59 respectively), this relationship was not observed with current or prior protease inhibitor therapy. Cases were also more likely to have a prior diagnosis of hypertension (OR=7.37), a positive family history for CHD (OR=6.89) and be on lipid lowering, antihypertensive and anti-platelet medications (OR = 4.76, 20.40 & 3.63 respectively). CD4 cell count and HIV viral load were not predictive of CHD in this preliminary analysis, but the duration of HIV infection was on average 474 days longer in cases than controls. Results of the complete 2:1 match will be presented.



Theme B: Co-Morbidities: 11.00am – 12.30pm

The role of Vitamin D (VD) in bone metabolism is well known. More recently, immune modulating and antiproliferative properties of VD have become evident. Cross-sectional studies demonstrate a high prevalence of VD deficiency in HIV and suggest that anti-retroviral (ARV) agents efavirenz (EFZ), ritonavir (RTV) and tenofovir (TDF) impact VD levels. However, prevalence and predictors of VD deficiency in HIV patients in Australia have not been documented.

A cross-sectional study of 517 HIV patients attending The Alfred Hospital Infectious Diseases Service. Measurement of 25(OH) vitamin D by (RocheElecsys®) assay was evaluated. Univariate logistic regression of predictors for Vitamin D deficiency with multivariate (MV) adjustment for season was performed.

The median VD level was 58 nmol/L. 73.3% of patients had insufficient levels (<75nmol/L), and 39.1% were deficient (<50nmol/L). Factors associated with low VD levels included female gender, age 30-49, season (Winter/Spring), Africa/Asia/European ethnicity, duration of HIV infection, viral load (VL), exposure to EFZ or nevirapine, estimated glomerular filtration rate and alkaline phosphatase (ALP). Factors associated with normal VD levels were male gender, age (18-29, >50), Australian ethnicity, Summer/Autumn, exposure to TDF, protease inhibitor (PI). On multivariate analysis, the following factors remained significant: male gender (OR:0.52 P<0.07), age (OR:0.98 P<0.01), Season: (Summer (OR:0.29) Autumn (OR:0.33) Winter (OR:1.56) Spring (OR:2.56) P<0.001), African (OR:6.25) P<0.01), Australian (OR:0.56 P<0.02), HIV duration (OR:1.2 P<0.001), RTV boosted PI (OR:0.59 P<0.01), PI (OR: 0.51 P<0.001) and ALP (OR:1.61 P<0.003). All remained significant after adjustment for season.

This study confirms traditional predictors of VD deficiency; gender, season and ethnicity and also confirms a high prevalence of VD insufficiency in HIV positive patients in Melbourne. HIV related factors including exposure to EFZ, duration of HIV infection and VL were associated with VD insufficiency, while exposure to PI and RTV boosted PI were significantly associated with normal VD levels. Further research into ARV effects on VD metabolism and efficacy of VD screening and supplementation in HIV is warranted.

We have sought to establish cardiovascular disease (CVD) risk management and smoking cessation strategies within the Royal Perth Hospital HIV Service, involving nursing (LW), dietitian (CW) and physician (DN) input into routine clinical care.

Cardiovascular risk screening during routine clinic visits was evaluated August-December 2008 (n=481). An Australian calculator (<http://www.cvdcheck.org.au/>) estimated 5-year CVD risk based on age, gender, smoking and diabetes status, total:HDL cholesterol ratio, and systolic blood pressure. Follow-up between January-March 2010 (n=530) followed a strategy of brief interviews during clinic visits.

387 males (37.5% aged ≥50 years) and 94 females (8.5% ≥50 years) were evaluated. Antiretroviral therapy (81%) was associated with aviremia in 74% of patients. Average CD4 count 577 cells/μL. Cardiovascular risk could be calculated for 288 individuals aged 35-74 years (76.2% of those within this age range). An additional 99 patients <34 years and four patients >74 years were not eligible for CVD risk assessment. Risk factors included smoking (45%), age >50 years (32%), elevated total:HDL cholesterol (32% with values >5), systolic blood pressure >140mmHg (20%), obesity with BMI >30 (15%), and diabetes (4%). High (>15%) 5-year CVD risk was noted for 38 patients, with moderate risk (10-15%) in a further 36 individuals. Individual risk factors were not significantly correlated with each other or with increasing age (all P >0.1). However, elevated BMI was associated with total:HDL cholesterol ratio (P=0.001), systolic blood pressure (P<0.001) and diabetes (P=0.05). Patterns of statin (45.5%) and antihypertensive (39.4%) treatment use among high-risk patients suggest a capacity for treatment optimisation.

At follow-up 198 smokers (37%) were identified, of whom 59 (30%) were contemplating or planning smoking cessation. 26 of the 218 smokers in the baseline audit reported quitting smoking (12%).

This strategy has identified 74 patients (15% of the overall cohort) with moderate-to-high CVD risk who would benefit from consideration of cardiovascular risk reduction, as well as a large proportion of smokers (45%) with early indications of smoking cessation as a result of this intervention. CVD risk management appears to be a valuable and sustainable aspect of overall HIV treatment in this population.

Paper Number: 343

TRADITIONAL AND HIV-RELATED FACTORS OF VITAMIN D INSUFFICIENCY IN MELBOURNE

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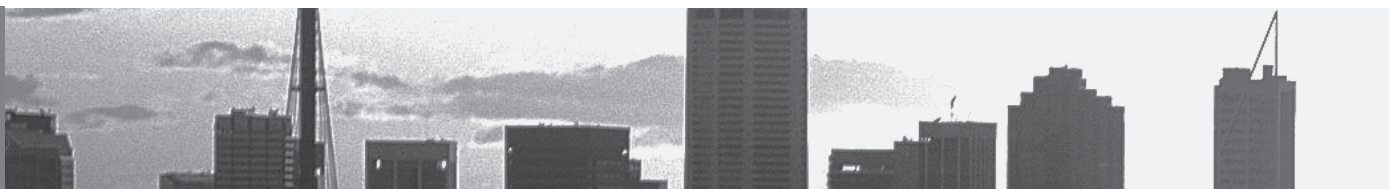
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Paper Number: 622

ASSESSING AND MANAGING CARDIOVASCULAR RISK AND SMOKING IN THE ROYAL PERTH HOSPITAL HIV COHORT

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Theme A Symposium: Translation: 11.00am – 12.30pm

Paper Number: 178

RAPID, IMMUNOCHROMATOGRAPHIC TEST FOR MEASUREMENT OF CD4+ T-CELLS AT POINT-OF-CARE.

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Rapid, point-of-care (RPOC) tests are used worldwide for diagnosis of diseases, including HIV, especially in resource-constrained countries (RCC). Antiviral drugs for the treatment of HIV/AIDS are becoming increasingly available in RCCs, but access to therapy is restricted by the need to measure patient CD4 T-cell levels prior to initiating therapy, typically by flow cytometry or by low-throughput, microscopic tests.

The Burnet Institute has developed a rapid immunochromatographic test for the semi-quantitative measurement of CD4 T-cells in whole blood, which relies on detection of full-length CD4 protein associated with T-cells, without interference from full-length CD4 on monocytes or the large and variable amount of soluble CD4 protein found in blood (especially in advanced HIV/AIDS). The easy-to-use 3 step test is compatible for use with fingerprick blood and does not require further sample processing or instrumentation, making it ideal for field use in RCCs.

In addition to field use in RCCs, RPOC measurement of CD4 T-cells could improve patient care in developed countries, as the test result can direct immediate treatment decisions during a patient visit. To facilitate uptake of the test into physician clinics and laboratories, we have integrated the immunochromatographic CD4 test with the Axxin Cubic (TM) platform leading to development of the Axxin AX-2 visual CD4 test and instrument.

It is anticipated that the Axxin AX-2 will also prove useful in training and proficiency testing of field workers in RCCs, because the same test cartridges and workflow are used for both visual and instrument-based analysis.

The CD4 immunochromatographic test will be able to guide treatment decisions at the point of care without extensive training or sophisticated equipment. The specific RPOC test for CD4 T-cells is anticipated to improve access to HIV treatment for individuals in RCCs, where flow cytometry is unable to meet needs for patient management.

Paper Number: 747

IMMUNE ESCAPE FROM HIV-SPECIFIC ADCC PRESSURE

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Effective immunity to HIV is poorly understood. In particular, a role for Antibody-dependent cellular cytotoxicity (ADCC) in controlling HIV is controversial. We hypothesized that significant pressure from HIV-specific ADCC would result in immune-escape variants. We mapped a series of ADCC epitopes to specific consensus strain HIV peptides from HIV+ subjects and then compared the ADCC responses to the same peptide epitope derived from the concurrent HIV sequence(s) expressed in circulating virus. In 8 of 12 epitopes studied, ADCC antibodies were unable to recognize the concurrent HIV sequence. Our studies suggest ADCC responses apply significant immune pressure to the virus. This has implications for the induction of ADCC responses by HIV vaccines.



Theme A Symposium: Translation: 11.00am – 12.30pm

Some HIV patients co-infected with hepatitis C virus when they begin ART experience an exacerbation of hepatitis manifested as a rise in serum alanine transaminase (ALT). This is considered to be an Immune Restoration Disease (IRD), but little is known about its clinical characteristics, incidence or pathogenesis. HIV/HCV co-infected individuals (n=50) commencing ART in Cipto Mangunkusumo Hospital (Jakarta, Indonesia) were studied. Plasma HCV-specific antibody, CXCL10, sCD26, sCD30, IL-18, TGF- β 1 and HCV-RNA were quantified at weeks 0, 4, 8, 12, 24 and any HCV-IRD event. Linear mixed effect models were used to compare patients with and without HCV IRD.

Nine patients experienced HCV IRD (incidence = 9.2 per 100 person weeks), exhibiting nausea and vomiting that resolved without changing treatment. Markers of T cell activation (sCD26 and sCD30) and immune recruitment to the liver (CXCL10) increased in some HCV IRD cases, whilst levels of IL-18 and TGF- β 1 were unchanged. Total anti-HCV antibody (assessed with a commercial assay using core, NS3 and NS5 antigens) was consistently lower in patients who developed HCV IRD, but antibody assessed using HCV core antigen alone did not show this pattern. HCV-RNA levels increased in both groups (p=0.002 in week-4) and declined but did not reach baseline in week-24. Linear mixed effect models adjusted for baseline characteristics found similar HCV-RNA changes after ART in HCV-IRD and non-HCV-IRD patients (p=0.49).

Logistic regression analysis showed baseline anti-HCV total and absolute CD4+T-cell count is the best predictor of HCV-IRD (AUC ROC = 0.86, sensitivity 88.9% and specificity 82.9%). Low baseline total anti-HCV antibody was in negative correlation (r=-0.30, p=0.04) with baseline HCV-RNA, suggesting that patients who had lower antibody response to HCV before ART had worse control of HCV replication and hence more risk of IRD. T-cell dependent mechanisms are implicated in HCV IRD, since many patients exhibited rises in sCD26, sCD30 and CXCL10.

Paper Number: 62

THE INCIDENCE, CAUSES AND PATHOGENESIS OF IMMUNE RESTORATION DISEASE MANIFESTED AS LIVER ENZYME ELEVATION IN HIV-HCV CO-INFECTED PATIENTS IN INDONESIA

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Theme C: Issues in HIV prevention in Gay Men 1: 11.00am – 12.30pm

Paper Number: 289
ANTIRETROVIRAL THERAPY (ART) AS HIV PREVENTION AMONG GAY MEN: BUILDING THE EVIDENCE BASE

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In the last two years, there has been a rapidly growing debate about the potential role of ART in HIV prevention. All published research evidence comes from heterosexual couples. As the probability of HIV transmission by anal intercourse is more than 10-fold greater than for vaginal intercourse, results cannot be extrapolated to homosexual men. Australian researchers have recently proposed a new cohort study of HIV transmission in homosexual couples to assess for the first time the role of ART in HIV prevention in this population.

We have conducted four feasibility studies: (1) email survey of the importance of the issue for clinical practices; (2) paper-and-pencil survey of delegates to the AFAO HIV educators conference, to evaluate their interest and capacity to refer participants into the study, (3) online survey to test recruitment through clinical practices, and (4) online survey of gay men in serodiscordant relationships to evaluate their interest in ART for HIV prevention.

Results suggest a significant level of interest among both health practitioners and gay men to obtain conclusive research evidence on the issue. Community organisations are supportive of the study: among 53 HIV educators, their interest and willingness to refer clients to the study were high (average scores 4.6 and 4.3 out of 5, respectively); 30 respondents indicated having clients in serodiscordant relationships and were willing to refer them into the study. Community based recruitment will be the most efficient approach. Results of the ongoing online survey of gay men in serodiscordant relationships will be presented.

A cohort study of the role of ART in HIV prevention in serodiscordant male couples has the potential to greatly influence the prevention agenda internationally. Australia is well placed to carry out research in this area, and there is a high degree of interest in such research from HIV educators, researchers, clinicians and community-based organisations.

Paper Number: 781
SMS REMINDERS INCREASE HIV/STI RE-TESTING RATES AMONG MEN WHO HAVE SEX WITH MEN AT SYDNEY SEXUAL HEALTH CENTRE

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In mid 2008, Sydney Sexual Health Centre implemented a SMS reminder system to improve re-testing rates for HIV and sexually transmissible infections (STIs) in men who have sex with men (MSM). Clinicians were encouraged to offer 3-6 monthly SMS reminders for HIV/STI screening to MSM.

We compared re-testing rates (two or more HIV/STI tests in 6 months) among MSM who received the SMS reminder between mid 2008 and 31 May 2010 (SMS group) to those who didn't receive the SMS reminder during a similar time period (control group), using a chi-square test and multivariate analysis which controlled for any imbalances in factors that could affect re-testing in the study groups.

There were 1947 HIV/STI tests conducted in HIV-negative MSM in the study time period; 1054 in the SMS group and 893 in the control group. In the SMS group, HIV/STI re-testing rates were significantly higher (61%) than the control group (21%) $p < 0.001$. There were two significant differences in patient characteristics between study groups that could affect re-testing rates: In the SMS group, 35% of patients reported three or more sexual partners in the last three months, compared to 44% in the control group ($p < 0.001$) and in the SMS group 21% of patients reported ano-genital symptoms compared to 36% in the control group ($p < 0.001$). After adjusting for these differences in the multivariate analysis we found HIV/STI re-testing was 5.3 times more likely (95%CI:4.3-6.5) in the SMS group compared to the control group.

SMS reminders at a large sexual health clinic more than doubled HIV/STI re-testing rates. SMS offers a cost-efficient system and has great potential value in increasing HIV/STI re-testing in clinical settings.



Theme C: Issues in HIV prevention in Gay Men 1: 11.00am – 12.30pm

HIV social and public health research has long depended on volunteer participants to provide an understanding of the lived HIV experience and behavioural data linked to sexual risk, seroconversion and prevention. There has been relatively little enquiry into what motivates participants, in tandem with an unchallenged assumption that altruism accounts for most volunteerism generally. Because retention of volunteers over time is crucial for longitudinal studies, we investigated the question "What is it that motivates volunteers to participate in HIV research?"

The longitudinal Sydney-based Health in Men Study (HIM) recruited 1427 HIV-negative men between 2000 and 2007. Participants were asked annually "Why have you decided to continue your involvement with the Study?", and 387 participants who completed all interviews over 6 years gave 1,116 responses to that question, containing 1,220 references to their reasons for volunteering. These references were fitted to one of 7 Motivation Categories (altruism, self, commitment, HIV research, identity/history, enjoyment and study pressure) built from recurring words and phrases used by the participants. Tallying the frequency of references within each Category produced a picture of important motivational drives among these men.

Community-based altruism scored the single highest frequency, with 303(25%) of total motivational references. However, other distinct and compelling self-based reasons for joining and completing the Study were also revealed, including personal well-being (197, 16%), identity (142, 12%), and enjoyment in the research process (94, 8%), which together represented 36% of all motivational references; when responses noting a personal commitment to the Study were included (248, 20%), this tally rose to 56%. We have examined private, emotional and social motivators of volunteers in the HIM Study. While self-interest might sometimes be associated with an insular social position, we found men who generated positive community action and wider health outcomes through participation that was often based on personal rationales rather than altruism. As investigators we may ask 'Does identifying why people volunteer in research really matter, just so long as they do?' For this HIM participant the answer was both personal and critical: "The Study has kept me HIV negative".

After a long decline, rates of HIV diagnosis in MSM began increasing in Australia ten years ago and continued to do so up until the last few years where the number of reported HIV diagnoses has plateaued. These data arise from notifications of HIV diagnoses which cannot necessarily be interpreted in terms of HIV prevalence and incidence both of which are important when measuring the impact of prevention strategies. We assess the predictors of HIV positivity and HIV seroconversion among men who have sex with men (MSM) in Victoria, Australia.

In April 2006, a sentinel surveillance network of gay men's health clinics and sexual health clinics was established to monitor HIV and other sexually transmitted infections (STIs) among gay men in Victoria by providing testing and behavioural data on individuals routinely tested at these clinics. We conducted retrospective longitudinal analyses of data from MSM who underwent HIV testing between April 2006 and June 2009 at three primary care clinics. HIV positivity and HIV incidence were estimated and Cox regression used to determine predictors of HIV seroconversion.

During the study period HIV positivity was 1.86% (95%CI:1.6-2.2) in 7857 MSM tested for HIV. There were 3272 repeat testers followed for 4837 person-years (PYs), 60 seroconverted and HIV incidence was 1.24 (95% CI: 0.96-1.60) per 100 PYs. Independent predictors of HIV seroconversion were; an infectious syphilis diagnosis within the last two years (Adjusted hazard ratio(AHR)=2.5, 95%CI:1.1-5.7), reporting six or more anal sex partners in the past six months (AHR=3.3, 95%CI:1.8-6.3), reporting their current regular partner was HIV positive (AHR=3.4, 95%CI:1.1-10.6) and reporting inconsistent condom use with casual partners in the past six months (AOR=4.4, 95%CI:1.7-11.5).

Our results call for HIV prevention to target subsets of high-risk MSM including men with a recent infectious syphilis diagnosis and men who have high numbers of partners, unprotected anal sex with casual partners and HIV-positive partners. Our findings highlight the importance of diagnosis and treatment of STIs as a HIV prevention strategy. The HIV incidence estimate will provide an important baseline to enable public health officials to measure the effectiveness of future strategies.

**Paper Number: 414
SELF-BASED RATIONALES
ARE IMPORTANT PRIMARY
MOTIVATORS FOR VOLUNTEERS
IN HIV RESEARCH**

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**Paper Number: 341
INFECTIOUS SYPHILIS IS
ASSOCIATED WITH INCREASED
RISK OF HIV SEROCONVERSION
IN MEN WHO HAVE SEX WITH
MEN IN VICTORIA**

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Theme C: Issues in HIV prevention in Gay Men 1: 11.00am – 12.30pm

Paper Number: 460

PER-CONTACT PROBABILITY OF HIV TRANSMISSION IN HOMOSEXUAL MEN IN SYDNEY IN THE ERA OF HAART

Jin F^{1,2}, Jansson J¹, Law M¹, Prestage GP¹, Zablotska I¹, Imrie JCG³, Kippax SC⁴, Kaldor JM¹, Grulich AE¹, Wilson DP¹

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It has been a decade since the last attempt to estimate the per-contact risk of HIV transmission in homosexual men, during which the landscape of HIV management has changed substantially. We report the per-contact probability of HIV transmission due to unprotected anal intercourse (UAI) in the era of highly active antiretroviral therapy (HAART) in a longitudinal cohort study of community-based HIV-negative homosexual men in Sydney.

A total 1427 participants were recruited from June 2001 to December 2004. They were followed up with 6-monthly detailed behavioural interviews and annual testing for HIV until June 2007. Data were used in a bootstrapping method, coupled with a statistical analysis that optimised a likelihood function for estimating the per-exposure risks of HIV transmission due to various forms of UAI, including insertive UAI, separated by circumcision status, and receptive UAI, separated by whether ejaculation inside rectum occurred.

During the study, a total of 1,381 men had at least one follow-up interview by the end of the study in June 2007, and 53 seroconverted to HIV. The estimation of per-contact risk was based on 1,136 men, including 46 HIV seroconverters, who reported at least one episode of UAI during the study. Over time, these men reported a total of 228,056 episodes of UAI. The estimated per-contact probability of HIV transmission for receptive UAI was 1.43% (95% CI 0.48%-2.85%) if ejaculation occurred inside the rectum, and it was 0.65% (95% CI 0.15%-1.53%) if withdrawal prior to ejaculation was involved. The estimated transmission rate for insertive UAI in participants who were circumcised was 0.11% (95% CI 0.02%-0.24%), and it was 0.62% (95% CI 0.07%-1.68%) in uncircumcised men. Thus, receptive UAI with ejaculation was found to be approximately twice as risky as receptive UAI with withdrawal or insertive UAI for uncircumcised men and over 10-times as risky as insertive UAI for circumcised men.

Despite the fact that a high proportion of HIV-infected men are on antiretroviral treatment and have undetectable viral load, the per-contact probability of HIV transmission due to UAI is similar to estimates reported from developed country settings in the pre-HAART era.

Paper Number: 535

EVALUATING AND FORECASTING THE MEDICAL OUTCOMES AND GEOGRAPHICAL DISTRIBUTION OF PEOPLE LIVING WITH HIV IN AUSTRALIA

Jansson J¹, Watson J², Wilson D³

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The health and survival of people living with HIV (PLWH) has substantially improved with the advent of effective combination antiretroviral therapy (ART). However, PLWH are increasingly becoming at greater risk of developing cancers, cardiovascular disease, mental health disorders, and other co-morbidities, especially as they age. Consequently the health needs of PLWH in Australia will change as these conditions develop and they move away from traditional hubs of HIV expertise. This study aims to understand the current demographic and geographical profile of Australia's HIV-infected population, the treatment pathways currently experienced, and the co-morbidities affecting this population as well as forecast these outcomes and demands for clinical service.

Calculations are carried out through an agent-based mathematical model directly informed by national HIV surveillance data and the Australian HIV Observational Database in order to simulate the treatment pathways over time of Australia's HIV-infected population. Australian Census Data are used to determine specific movement patterns across geographical Statistical Local Areas. Baseline cancer incidence rates were sourced from AIHW and combined with findings from systematic reviews of the international peer-reviewed literature to determine associations between PLWH demographic variables and cancer-related morbidities.

We estimated that by the end of 2009, approximately 23400 people were currently living with diagnosed HIV in Australia. Projections of future HIV infections and modelling of mortality rates gave an estimate of 31700 people living with HIV by the end of 2020. The profile of the population is expected to shift significantly to ~50% of PLWH being over 45 years of age compared to ~30% currently and ~20% 15 years ago. The model also showed that many cancers increased among the population due to the ageing of the HIV cohort.

The results from this model have far reaching implications. The results add to existing surveillance mechanisms, evaluate the current state and project expectations for the future in order to assist in planning to provide the best standard of care and management for Australian PLWH. A clearer understanding provided by this model of the geographical and temporal location of those with HIV will also help target interventions to reduce transmission of HIV.



Theme D: The Social Dynamics of ART and Bio-medical Prevention: 11.00am – 12.30pm

The landscape of HIV biomedical prevention research is a dynamic one, as results from efficacy trials emerge and set new benchmarks in HIV prevention. All prevention technologies are partially effective in that they reduce but not eliminate the risk of HIV acquisition, begging the question of when and how to integrate newly proven technologies into ongoing or planned prevention trials, and the likely impacts of such a move. We reviewed published guidance and arguments on this problem.

Under UNAIDS guidance, researchers must ensure that participants in HIV biomedical prevention trials have access to all state of the art HIV risk reduction methods. Researchers are instructed to negotiate the incorporation of new prevention methods into existing trials with research stakeholders, taking into consideration feasibility, expected impact, and the ability to isolate the impact of the biomedical HIV modality being tested.

Published critics of this guidance contend that it makes prevention research logistically infeasible. The specific concern is loss of power, in that detecting the effect of the experimental product if HIV incidence in the study population is substantially reduced by use of the newly proven prevention technologies in all participants.

Resolution to this dilemma requires an analysis of what is actually understood by a new prevention strategy being proven to be state of the art. There is uncertainty as to whether efficacy alone needs to have been established for the UNAIDS requirement to apply, or whether other criteria, such as safety, acceptability and cost-effectiveness need to have been established. Regardless of the criteria adopted, there is also the question of who makes the judgement that a new strategy is state of the art.

A more detailed framework is required if recommendations for inclusion of new prevention strategies in trials are to be practical.

Discussion of PNG's experience of HIV has been heavily influenced by comparisons with sub-Saharan Africa's. Yet earlier fears that HIV in PNG could reach levels comparable to sub-Saharan's worst national epidemics do not seem to have materialized and no longer appear to be projected. The theory that widespread networks of concurrent heterosexual relationships 'explain' the unusually high level of HIV in some sub-Saharan countries, if accepted, may suggest one of many possible contrasts—and a contrast that pivots on the position of women. Drawing on recent literature, including Helen Epstein's *The Invisible Cure* (2008), this presentation reflects on the significance of female-to-male transmission in high prevalence national epidemics and in PNG. It also reflects on the role of economic factors in shaping circumstances where the (relatively low) likelihood of such transmission is increased. If these reflections amount to more than speculation, their implications for both prevention efforts and prevention messages seem difficult.

PNG has an estimated HIV prevalence of around 2% in adults, but HIV care services had been slow to reach all those in need. However, ART services have been scaled up in all regional and provincial hospitals since its start in 2004. At the end of 2008, 52 health facilities offered ART with 6079 adults, 348 children on ART.

This presentation examines measures and understandings of wellbeing in people on antiretroviral therapy (ART) in PNG using survey data, the stories of those on ART, and visual images. The data drawn on comes from a mixed method research project of PNG Institute of Medical Research and UNSW in six sites (5 provinces) in PNG. The project surveyed 347 people on ART, carried out in-depth interviews with 36 people who also completed drawings of themselves before and after treatment.

The data indicates that for people living with HIV in Papua New Guinea, going onto ART meant an improvement in all key areas of health and well-being.

**Paper Number: 533
POWER VS PROTECTION: TRADING STANDARDS IN PREVENTION TRIALS**

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**Paper Number: 732
HYPOTHETICALS FOR PNG: CONCURRENCE AND THE SIGNIFICANCE OF FEMALE-TO-MALE TRANSMISSION**

Luker, V

Australian National University, Canberra, ACT, Australia

**PAPER NUMBER: 313
BIPO ART MI DAI MAN EM MI STAP: [BEFORE ART I WAS A DEAD MAN]: WELLBEING OF PEOPLE ON ANTIRETROVIRAL THERAPY IN PAPUA NEW GUINEA**

Kelly A¹, Heather Worth²

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²University of New South Wales



Theme D: The Social Dynamics of ART and Bio-medical Prevention: 11.00am – 12.30pm

Paper Number: 209

"I AM PHYSICALLY WELL BUT STILL NOT HAPPY FROM INSIDE": A STUDY ON ANTIRETROVIRAL-THERAPY AMONG THE PEOPLE INJECTING DRUGS (PIDs)

Shrestha SD¹, Liamputtong P²

¹ & ² School of Public Health, La Trobe University, Melbourne, VIC, Australia

Community based antiretroviral treatment (CBART) has been identified as one of the effective approaches to reach the most-at-risk population for HIV. However, studies have revealed that a substantial proportion of such client's quality of life (QoL) score was actually decreased after a period of treatment. This study aimed to explore perceived 'QoL' among the 'PIDs' in their word.

This study was conducted at a 'CBART' site in Nepal. We invited 30 eligible men to participate in focus group discussion (FGD); out of them 10 participated. The first author facilitated the discussion using the FGD Guideline which was tape recorded, transcribed and then translated into English. Thematic analysis was employed for data analysis.

We found almost all participants reported physically well. However, a considerable proportion expressed that they were unhappy internally. Their emotional wellbeing seems eroded by painful experiences; e.g., one man said even his wife calls him "a bundle of AIDs". Hence, he could not expect better responses from other in the community. Other stated that they feared of possible humiliation to family. They attributed such social responses partly to the media which portrayed HIV as deadly disease in past. The other concern was widespread discriminatory responses in the health care settings. This was also supported by service providers' responses about the clients' difficulties in accessing laboratory and specialized curative services. Additionally, we found disclosure of HIV status in such health care settings were common. Participants reported disastrous implications of such disclosures on their family life and expressed utmost helplessness. They felt deep sense of agony towards those health professionals who breached their confidentiality and or mistreated them. Importantly, they aspired to be accepted as human beings, obtain an employment and a financing scheme for costly treatment as their family thought that sparing money for their treatment as waste. Finally, most of the participants perceived 'QoL' as ability to have good relationship with family and friends; fulfil social responsibilities and being happy.

As emotional wellbeing seems depend on social wellbeing; promoting social acceptance should be incorporated as an integral component of "Comprehensive care & treatment package".



Satellite Symposium: Has HIV dropped off the global agenda? Key and current issues in promoting an effective HIV response.
Sponsored by HIV Consortium: 11.00am – 12.30pm

2010 marks the final deadline in the United Nations campaign launched in 2006 for Universal Access to prevention, treatment, care and support for people living with HIV/AIDS worldwide. This symposium will explore what progress has been made and what still needs to be done to fully achieve these unattained goals for people living with HIV, affected communities and populations at higher risk of HIV exposure. Is HIV still a global crisis? What about in Asia and the Pacific? What do we still need to know in order to respond? What are the key and emerging issues which need to be addressed for an effective response? Is the right balance being found between prevention and treatment, care and support? Is it a positive development if the global focus shifts to the Millennium Development Goals as a mechanism for measuring progress?

In recent years there have been changes to HIV policy at a global level, as well as world events such as the global financial crisis, which present new challenges, as well as opportunities, for effectively responding to HIV. This paper will examine some key contextual changes and reflect on recent discussions occurring in Australia, as well as internationally at forums such as the recent Vienna International AIDS Conference. The way in which these changes impact on the Asia and Pacific region will be explored.

Paper Number: 909
KEY AND EMERGING ISSUES FOR AN EFFECTIVE HIV RESPONSE

Bebbington M
HIV Consortium for Partnerships in Asia and the Pacific, Sydney, Australia

This paper will examine the epidemiological, social and economic evidence for HIV as a crisis in our region. It will unpack the notion of 'HIV crisis' and then examine the pros and cons, the rhetoric and reality in the crisis arguments (using various countries as case studies). It will seek to debunk some myths about 'HIV crisis' but pose some genuine evidence-based concerns about the response to HIV in the region.

Paper Number: 911
HIV AS A CRISIS IN ASIA AND PACIFIC: WHAT IS THE EVIDENCE?

Worth H
University of New South Wales, Sydney, Australia

people living with HIV is access to treatment. Governments set targets for access to treatment. Are they realistic and do they deliver against them? The primary mechanism for holding governments accountable is UNGASS reporting against treatment indicators. This presentation explains what the processes are and how PLHIV working with other members of civil society can get involved. Two case studies of success in this region are discussed, and the initiatives that APN+ is undertaking to get more PLHIV in more countries involved are highlighted.

Paper Number: 912
PLHIV keeping governments accountable for Universal Access targets

Gustav R
Asia Pacific Network of PLHIV (APN+), Bangkok, Thailand
The single most important thing for

Theme B: Resistance, Co-infection and Complications of HIV and its Treatment: 1.30pm - 3.00pm

Paper Number: 723
TEMPORAL CHANGES IN THE PREVALENCE OF HIV DRUG RESISTANCE MUTATIONS AND THE INFLUENCE OF ANTIRETROVIRAL DRUG PRESCRIBING HABITS.

Gooley M^{1,2}, Chibo D¹, Nichols J¹, Papadakis A¹, Richards N¹, Birch C^{1,3}.

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²Public Health, La Trobe University Bundoora Australia;

³Microbiology Department, Monash University, Melbourne, Australia.

We investigated trends in the prevalence of antiretroviral (ARV) drug resistance mutations during the period 2000 to 2009 and related them to the ARV drug prescribing practices of treating doctors and the incidence of patients with undetectable HIV viral load. A database containing patient-specific drug resistant mutations obtained by genotyping was used to investigate the annual prevalence of individual mutations associated with resistance to protease inhibitors (PIs), nucleoside reverse transcriptase (RT) inhibitors (NRTIs) and non-nucleoside RT inhibitors (NNRTIs). These were then related to treating doctor's drug prescribing regimens available on the NCHECR website. The annual proportion of patients with undetectable viral loads was obtained by reference to our HIV database. The incidence of resistance decreased for all drug classes over the course of the study. The prevalence of the most common NRTI mutation M184V and NNRTI mutation K103N decreased while the protease mutation L90M stayed the same. Changes in the prevalence of resistance mutations occurred on a background of an increasing prevalence of patients with undetectable viral loads. The increased potency of current ARV drugs, the reduction in acute adverse side-effects associated with their use and an increase in the number of patients with undetectable viral loads appears to have had a significant effect on the prevalence of resistance mutations associated with the major drug classes.

Paper Number: 626
THE CHARACTERISTICS OF HIV-POSITIVE ADULTS WITH AND WITHOUT DIAGNOSES OF MALIGNANCY ATTENDING THREE HIV CLINICS IN SYDNEY, AUSTRALIA.

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HIV-positive individuals are recognised to be at increased risk of developing malignancies, compared to the general population. Immunosuppression and other oncogenic mechanisms, such as chronic viral infections and smoking have been identified as major risk factors in the development of such malignancies.

Clearly defining the characteristics of HIV-positive individuals diagnosed with malignancies could have significant impact on the diagnosis and management of affected individuals, the development of clinical services and understanding of the mechanisms of oncogenesis.

Previous studies in Australia have been based on registry linkage and thus lack many individual-level data points on factors such as antiretroviral treatment, co-infections and immune status markers. We therefore set out to describe the demographic, immunological, and clinical characteristics of HIV-infected adults diagnosed with malignancy over the period 1980-2009.

Cases were defined as HIV-positive people with any diagnosis of cancer and controls as HIV positive people without cancer from the same hospital database attending within the same year. Demographic, immunological, and clinical characteristics data were then collected from patient records. We estimate that 500 cases will be identified during the study period and 1500 controls will be identified.

Initial results from one study site identified 78 cases of Kaposi's sarcoma (median age at diagnosis 41 years (range 37- 49 years)). 107 patients were identified with lymphoma, of whom 24% had Non-Hodgkin's lymphoma, 48% Hodgkin's lymphoma, and 28% with a diagnosis of "lymphoma". The median age at diagnosis of lymphoma cases was 43 years (range 26-61 years). 20 cases of anal cancer have also been identified.

Population-based studies indicate that a growing proportion of clinical activity related to HIV management is devoted to the diagnosis and care of patients of cancers. This study will review the key demographic, immunological and clinical findings and identify possible factors to improve clinical care.

Theme B: Resistance, Co-infection and Complications of HIV and its Treatment: 1.30pm - 3.00pm

Neurocognitive (NC) impairment remains prevalent, despite combination antiretroviral therapy (cART). Differences between changes in cerebral function tests and alternative cART has not previously been prospectively assessed.

HIV-infected therapy-naïve individuals, randomly allocated to commence cART within the Altair study (tenofovir/emtricitabine; TDF/FTC plus either efavirenz; EFV (Arm I), ritonavir-boosted atazanavir; ATV/RTV (Arm II) or zidovudine plus abacavir; AZT/ABC (Arm III)) were eligible. Cerebral function tests included computerised NC testing (CogState™) and assessment of cerebral metabolites using cerebral proton-MRS in three anatomical voxels (right frontal white (FWM), grey matter and basal ganglia (RBG)) at baseline and after 48 weeks on study. N-acetylaspartate/ creatine (NAA/Cr) ratios were calculated. Differences between changes in NC function and NAA/Cr ratios over 48 weeks and study arms (Arm I versus II and I versus III) were assessed by linear regression modelling.

30 subjects completed study procedures (9, 9 and 12 subjects in Arms I, II and III, respectively) at four clinic sites. Mean CD4+ counts (SD, cells/μL) were 218 (87) and 342 (145) at baseline and week 48, respectively. Plasma HIV-RNA was <50 copies/mL in 28/30 subjects at week 48. Over 48 weeks, greater improvements in identification reaction time (IRT, $p=0.04$) and executive function ($p=0.02$) were observed in Arm III, compared with Arm I (+0.03, -0.30, -0.50 log10 msec change IRT, in Arms I, II and III, respectively). Increases in NAA/Cr were observed in all voxels (maximum 38% in RBG) over 48 weeks of study. In a multivariate model, statistically significantly greater increases in NAA/Cr were observed in Arm I versus II ($p=0.03$) in FWM (30%, -7%, 0% change in NAA/Cr, in Arms I, II and III, respectively).

: This is the first study to prospectively describe different changes in cerebral function testing parameters between different cART. Greater improvements in neuronal recovery markers (NAA/Cr ratio) were observed in recipients of TDF/FTC plus EFV (Arm I) and greater improvements in NC function testing observed in recipients of TDF/FTC plus ABC/AZT (Arm III).

Paper Number: 799

CHOICE OF COMBINATION ANTIRETROVIRAL THERAPY (CART) ALTERS CHANGES IN CEREBRAL FUNCTION TESTING AFTER 48 WEEKS IN TREATMENT-NAÏVE, HIV-1 INFECTED SUBJECTS COMMENCING CART: A RANDOMISED CONTROLLED STUDY

Winston A¹, Duncombe C², Li PCK³, Gill MJ⁴, Kerr SJ^{2,5}, Puls R⁵, Petoumenos K⁵, Taylor-Robinson SD¹, Emery S⁵, Cooper DA⁵ for the Altair Study Group.

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The introduction of Highly Active Antiretroviral Therapy (HAART) has altered the pattern of dermatologic disease among HIV-infected patients. Commencement of HAART usually results in a decrease of plasma HIV-RNA followed by a rise in CD4 T-helper cell and CD8+ cell counts. There is an early rapid increase in memory lymphocytes (CD45RO) and native cells (CD45RA).¹

While the majority of patients benefit substantially from HAART-induced immune recovery, a subset experience unmasking of new skin disease or paradoxical worsening of existing dermatologic conditions. This is known as Immune Reconstitution Inflammatory Syndrome (IRIS).

Cutaneous IRIS is described in association with a range of infectious, inflammatory, neoplastic, and autoimmune disorders. The diversity of recognized skin manifestations of IRIS continues to expand.²

Common inflammatory skin eruptions such as acne, rosacea and seborrhoeic dermatitis may be associated with IRIS, as well as viral infections such as warts, and others diseases including varicella zoster, and Kaposi's sarcoma,

We present a series of patients seen in the HIV dermatology clinic where a flare or unmasking of a range of dermatologic conditions associated with IRIS have been observed. Ensuring that the patient understands that the apparent flare of their skin conditions is part of what can happen as the immune system improves is an essential part of patient management.

We hypothesize that restoration of the immune response, involving the interplay of both innate and adaptive immunity to various micro-organisms (including commensals of the skin) could explain the reactivation of acne, rosacea and seborrhoeic dermatitis as well as other conditions seen after initiation of HAART.

Paper Number: 792

THE CUTANEOUS MANIFESTATIONS OF THE IMMUNE RECONSTITUTION INFLAMMATORY SYNDROME (IRIS) ASSOCIATED WITH HIV INFECTION.

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Theme B: Resistance, Co-infection and Complications of HIV and its Treatment: 1.30pm - 3.00pm

Paper Number: 541
NEW BIOMARKERS FOR NEUROCOGNITIVE IMPAIRMENT IN OLDER AND CLINICALLY STABLE HIV+ INDIVIDUALS

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⁴HIV, Immunology and Infectious Diseases Unit, St. Vincent's Hospital, Sydney, Australia.

We report the baseline results of an ongoing, prospective study investigating the neurocognitive (NC) profile of older (45 years+), HIV+ individuals, with a nadir CD4 \leq 350, ART stable \geq 6 months, HIV duration \geq 5 years and without neuropsychiatric confounds.

61 HIV+ individuals and 12 HIV-negative (HIV-) individuals were enrolled. All were examined with neuropsychological (NP) testing assessing seven cognitive ability domains. NP data were demographically corrected prior to analysis. Overall NC impairment rate was defined with the Global Deficit Score (GDS). The GDS is an average of all tests, each scored between 0 (normal) and 5 (severe impairment). A GDS of \geq 0.5 is a clinically validated cut-off to define global NC impairment. All were examined for depressive and cognitive complaints. HIV+ individuals received fasting blood tests (allowing a Framingham score computation); CD4 cell count, plasma and CSF (N=28) viral load, and radial arterial tonometry (to measure arterial stiffness).

Mean group ages were similar: HIV+ 57 yrs and HIV- 54 yrs. In the HIV+ group, HIV duration was 19.5 years, current median CD4 527, nadir CD4 180; 73% had AIDS, and all but one were virally suppressed in the plasma and CSF. Overall NC impairment rate was 20% in the HIV+ versus 0% in the HIV- ($p < .03$). There was also a significant difference in overall NC performance between serostatus groups (GDS = 0.32 ± 0.47 vs. 0.14 ± 0.14 ; $p < .02$). HIV+ individuals reported more cognitive complaints (4.3 ± 5.1 vs. 2.6 ± 0.14 ; $p < .02$). 15% of the HIV+ group reported clinically relevant depressive complaints and none in the HIV- group ($p = .07$). Among the HIV biomarkers, only a higher CD8 cell count was associated with worse NC performance ($r = -.32$; $p < .02$). Among the cardio-vascular markers, a higher Framingham score had a modest adverse effect on memory and motor performance ($r = -.22$; $p = .08$).

NC impairment is present in 20% of well-managed older HIV+ individuals with long HIV disease duration. This prevalence rate in this type of cohort is in accord with other international findings. A higher CD8 cell count may be a new biomarker for NC impairment while cardio-vascular risks factors at this stage appear less important.

Paper Number: 292
THE IMPACT OF HEPATITIS C CO-INFECTION WITH HIV/AIDS IN COMPARING WITH THE MONO INFECTION HIV/AIDS IN THE PROGRAM ESTHER, CALMETTE HOSPITAL.

S. Limsreng¹, N. Lerolle³, S. Ken², B. Guillard², C.L. Kao¹, S. Ly², I. Fournier-Nicollé², C.R. Hak¹, J.P. Brosseau³, P. Khuon¹, J.F. Delfraissy³, V. Ouk¹, O. Segal³

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To determine the prevalence of hepatitis C, B or Hepatitis C co-infection HIV on HAART, To compare the evolution of CD4, Viral load among the non co-infection of Hepatitis C on HAART,

All HIV+ patients presented Ab-HCV+ were enrolled in our study then, all of them has been done the clinical examination, biological checked such as: (CBC, CD4 count, TP, Albuminemia, Bilirubinemia, Fibrotest-ActiTest) and virological checked by (PCR of HCV RNA qualitative, genotype) and abdominal ultrasound checked.

A total 507 HIV/AIDS patients, 54 (11%) were Ab-HCV positive and only 50 (86%) patients accepted to participated in the study. Of these 29 (58%) were male, 21 (42%) were female with median age was 44 years old. Among these 31 (62%) patients HCB RNA by PCR was positive which presented 1b and 6 genotypes (20(64%) and 08(25%) respected). One patient presented with HBV-HVC/HIV. For the associated pathologies among 31 PCR positive: 7(23%) were chronic of alcohols intake, 4(13%) diabetes mellitus, and 11(36%) were cirrhotic phase according the clinical or ultrasound finding. For Fibro Test-ActiTest revealed: severe Fibrosis (F3 or F4) in 51%.

Both of the 2 groups concerning: the duration of HIV infection, CD4 baseline, ARV drugs failure were similarly in analyzed. For the immunological failure by the WHO criteria was seen 32% vs 15% ($p: 0.037$) respected and hemolyzed has been seen among the co-infection on baseline 64% vs 40%, ($p: 0.018$) and after 06 months on ARV treatment: 8% vs 1%, ($p: 0.1$) respected.

Hepatitis C was active on 60% among the co-infection patients. More than half of HCV co-infection was presented with severe FibroTest-ActiTest and immunological failure under HAART and theirs hepatotoxic were frequency seen.

Theme C: Emerging issues in HIV prevention in Australia: 1.30pm - 3.00pm

The proportion of people who have acquired HIV while travelling or working in other countries is an emerging epidemic in Australia. In Western Australia (WA) this has become approximately half of new male infections, with most of these infections among heterosexual men. Epidemiological surveillance data showed what was happening but not why or why it was increasing, nor opportunities for intervention.

In-depth interviews were conducted with WA male residents who had recently acquired HIV while travelling or working in Asian and African countries to investigate the social, cultural, setting, behavioural, cognitive, gender and power dynamics which may have contributed to HIV transmission. 14 men (9 self identified heterosexual, 5 self identified gay) who met the criteria were interviewed using a semi structured schedule. Interview transcripts were analysed using a modified constant comparative method to identify major themes. This paper will focus on two of the major themes that emerged.

Firstly, the strong and sustained networks amongst Australian expatriates and longer term travellers heavily influenced the men's understanding of the culture and contexts of the country, how to meet sexual and relationship partners, and created an experience of mentoring and camaraderie. Secondly, participants perspectives before and during their time abroad were not risk averse, but the nature of their travel tended to be about engaging with a new culture, escaping from and finding new experiences, realising fantasies, and/or actively living a life less ordinary.

Health promotion strategies may need to consider more targeted programs rather than a single campaign for all expatriates and tourists, or closer collaboration and support of local in-country campaigns. The influence and role of social networks amongst these men while in country may be very influential and indicates that prevention interventions that engage with these networks and risk perspectives may be effective in targeting programs. However significant cultural, gender and power issues need to be engaged with.

Over the last decade, there have been a number of significant shifts in the demographic characteristics of the HIV epidemic in Western Australia (WA). Some of these trends are unique when compared to other Australian jurisdictions mainly due to specific patterns of overseas migrations and travel. In this study, we sought to characterise the changes to HIV-1 genetic diversity within the state over this time. We analysed pre-treatment and post-treatment HIV-1 reverse transcriptase (RT) and protease sequences obtained for assessment of drug resistance in 590 individuals with HIV-1 infection between 2000 and 2009. The testing laboratory provides a state-wide drug resistance testing service and associated clinical and drug treatment data are available.

There has been a significant diversification in HIV-1 RT and protease strains over the last decade in WA, including a 29% increase in non-subtype B subtypes. In 2000 the non-subtype B RT subtypes, AE and C, were present at 1% and 5% prevalence respectively but by 2009 these figures had increased to 10% and 22% respectively. The same trend was present among non-B protease sequences. There has also been some intra-subtype diversification and identification of novel recombinants, not previously seen in WA.

Although subtype B remains the most prevalent HIV-1 subtype in WA, there has been a striking change in the overall subtype distribution over the last decade and changes to within-subtype diversity and prevalence of recombinants. These changes to the molecular epidemiology of HIV-1 in WA reflect a number of documented demographic shifts over the last decade and have implications for HIV service delivery, surveillance and aspects of clinical care.

Paper Number: 366 **'I WAS NOT SOME YOUNG TOURIST': ACQUISITION OF HIV AMONG AUSTRALIAN MEN WHILE TRAVELLING AND WORKING OVERSEAS**

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Paper Number: 555 **SHIFTING MOLECULAR EPIDEMIOLOGY OF THE HIV-1 EPIDEMIC IN WESTERN AUSTRALIA OVER THE LAST DECADE.**

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¹Department of Clinical Immunology, Royal Perth Hospital, Perth, WA, Australia.

Theme C: Emerging issues in HIV prevention in Australia: 1.30pm - 3.00pm

Paper Number: 333
A REVIEW OF EVIDENCE TO
GUIDE TARGETED APPROACHES
TO HIV/AIDS PREVENTION
AMONG IMMIGRANTS IN HIGH-
INCOME COUNTRIES

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Globally over 95% of people acquiring HIV each year live in developing and middle income countries. Immigrants from these countries now make up a significant proportion of people living with HIV in many high-income countries including Australia. Dominant modes of HIV transmission among these immigrants tend to be atypical to host country populations and there is consistent evidence of disparities in health outcomes such as later presentation with HIV.

In Australia, targeted and culturally appropriate interventions have been central to HIV prevention among gay men, sex workers and people who inject drugs. A key gap in our evidence base includes what we can learn from other high-income countries to guide new, or strengthen existing approaches, to culturally appropriate HIV prevention with immigrants from culturally and linguistically diverse (CALD) backgrounds in Australia.

A review of evidence explored HIV prevention with immigrants in high-income countries and sought to 'unpack' the mechanisms for achieving cultural appropriateness. Two types of studies contributed to the research: studies of interventions and qualitative studies of immigrants' views on HIV/AIDS prevention.

Seven preliminary mechanisms – 'authenticity', 'understanding', 'consonance', 'specificity', 'embeddedness', 'endorsement' and 'framing' were generated from a scan of the literature. These mechanisms were then tested and refined against evidence - 74 peer-reviewed and 'grey' studies relevant to HIV prevention with immigrants living in high-income countries- found in systematic searches in major public health databases.

The paper will provide a summary of the findings from this review which pointed to the pivotal, moderately important and least critical mechanisms to enhance cultural appropriateness in HIV prevention interventions with immigrants. The paper will also discuss the implications for policy and practice in addressing the emergent epidemic of HIV among CALD communities in Australia.

Paper Number: 246
THE EFFECTS OF EXERCISE
TRAINING ON METABOLIC AND
MORPHOLOGICAL OUTCOMES
FOR PEOPLE LIVING WITH HIV:
A SYSTEMATIC REVIEW OF RAN-
DOMISED CONTROLLED TRIALS

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Exercise training has been advocated as a treatment strategy to help manage HIV infection and the associated metabolic and morphological complications. Exercise may increase strength, cardiovascular fitness, quality of life and psychological parameters in HIV, but its effects on metabolic and morphological complications are unclear. This review aimed to determine the effects of exercise training interventions on metabolic and morphological outcomes among people with HIV in randomized, controlled trials (RCTs).

MEDLINE, CINAHL, EMBASE, Cochrane Database of Systematic Reviews, Physiotherapy Evidence Database, Sports Discuss and Informit were searched from 1980 until November 2009. RCTs of ≥ 4 weeks duration comparing aerobic exercise (AE) or progressive resistive exercise (PRE) or combined AE and PRE with no exercise or another exercise intervention, performed at least twice weekly among HIV infected adults (≥ 18 years) were included. Two reviewers completed data extraction and quality assessment independently. Statistical analyses examined differences between exercise versus no exercise and between two different forms of exercise.

Of 2202 original citations, nine RCTs with a total of 469 participants (41% females) met the inclusion criteria. Quality of RCTs was moderate (mean \pm SD of 5 ± 1 , range 3 - 8/10). Meta analyses demonstrated decreased body mass index (weighted mean difference [WMD]: -1.31, 95% CI: -2.59, 0.03, n=89), triceps skin fold thickness of subcutaneous fat (WMD: -1.83mm, 95% CI: -2.36, -1.30, n=79), total body fat (%) (standardised mean difference [SMD] -0.37, 95% CI: -0.74, -0.01, n=118), waist circumference (SMD: -0.74mm, 95% CI: -1.08, 0.39, n=77) and waist hip ratio (SMD: -0.94, 95% CI: -1.30, -0.58, n=77) with AE when compared to controls and increased body weight (5.09kg, 95% CI: 2.13, 8.05, n=46) with PRE compared to controls. Limited information is available on the effects on blood lipids, glucose and bone density.

Few RCTs exist and the quality of existing studies varies. Both AE and PRE in isolation may improve selected morphological outcomes, but their metabolic effects have not been well studied. There is a need for further study, with emphasis on improving trial quality and including metabolic outcomes relevant to people living with chronic, treated HIV infection, such as blood lipids, glucose and bone density.



Theme C: Emerging issues in HIV prevention in Australia: 1.30pm - 3.00pm

In Australia the number of new diagnoses of HIV steadily increased over the last decade with similar trends in other developed countries. There is a growing acknowledgement that HIV infection needs to be normalised and its diagnosis considered a task for all medical practitioners. This study aimed to ascertain how frequently general practitioners (GPs) in Australia test patients for HIV and determine predictors of barriers to testing.

We analysed data from the Bettering the Evaluation and Care of Health (BEACH) programme; a cross-sectional, national survey of GP activity in which each GP recorded 100 consecutive encounters. We compared the demographic and practice characteristics of GPs who tested for HIV with those who did not. We identified all GP, patient and encounter characteristics that were associated with higher rates of HIV testing for the April 2000 to March 2008 period. 'Opportunity to test' (further divided into 'risk factor' and 'screening') was defined as the presence at the encounter of problems strongly associated with the ordering of HIV tests. Multiple logistic regressions were used to measure the independent effect of each GP, patient and encounter characteristic on testing for HIV.

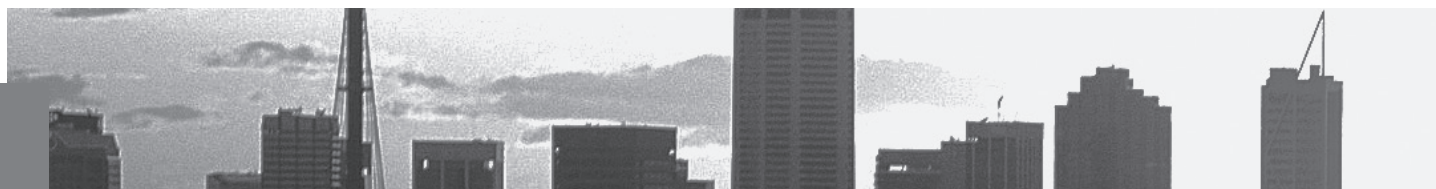
Data were available for 784,300 encounters from 7,843 GPs. 1,479 (19%) of GPs performed at least one HIV test within their 100 encounters. HIV testing rates remained constant over the study period. Independent predictors of HIV testing included the management of a 'risk factor' (OR 19.9 95% CI 17.8-22.4); screening (OR 10.8 95% CI 9.5- 12.4); younger GP age; practice in a metropolitan area (OR 1.4 95% CI 1.2-1.6) and patient age, sex (males>females OR 3.0 95% CI 2.7-3.4) being new to that practice (OR 2.1 95% CI 1.8-2.3) and being Indigenous (OR 1.7 95% CI 1.2-2.4).

This study suggests that if we wish to increase testing for HIV, we must target older, rural GPs and find ways to encourage at-risk patients to bring these issues to the attention of the GP; thus providing the GP an opportunity to test as the lack of 'opportunity' appears to be a barrier to testing.

Paper Number: 602
HIV TESTING IN GENERAL PRACTICE

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Theme D Symposium: The Dialogue between Social Science, Public Health and Medicine: 1.30pm - 3.00pm

Paper Number: 834
NEGOTIATING BIOMEDICINE:
ACCOMMODATION OR
RESISTANCE

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HIV prevention has stalled and scientists are asking why the epidemic remains uncontrolled. At the recent International AIDS Conference in Vienna many of the presentations dealing with matters relating to HIV prevention reinforced the view that increasing reliance is being placed on HIV biomedical interventions – as opposed to behavioural change interventions – as the primary means of arresting ongoing and persistent HIV transmission, and that somehow this emphasis will circumvent the behavioural and structural impediments that have stymied efforts to date. However, the differentiation of biomedical from behaviour change interventions is a false one. Whether the prevention programs or interventions advocate the use of condoms, clean needles and syringes, microbicides or pre- and post-exposure prophylaxis, they all require behavioural changes. Using the new 'test and treat' strategy as an example, this paper examines the social, political and economic barriers to making this an effective HIV prevention strategy and argues that without the input of social scientists and economists, prevention is likely to be hindered not helped by the roll-out of such strategies.

Theme A: Molecular Virology: 1.30pm - 3.00pm

We have previously reported the induction of prolonged HIV-1 transcriptional gene silencing by si/shRNAs targeting the highly conserved tandem NF- κ B binding sequences within the HIV-1 5'LTR (PromA-si/shRNA) in T-cell lines. Recent articles have suggested that siRNAs based approach often result in induction of off-target effects. Single strand and double stranded RNAs can be recognized by endosomal receptors such as TLR3, TLR7, and TLR8, which trigger Interferon (INF) pathways as down-stream responses of off-targets effects. These off-target effects are a major concern of any RNA gene silencing approach. We investigated whether or not the shRNA can induce changes in expression of other NF- κ B driven genes including INF responses since our target is an NF- κ B binding motif.

Using retroviral delivery, we established MOLT-4 cell lines stably expressing an shRNA targeting NF- κ B (MOLT-4 shPromA), four variants expressing shRNA variants with 2-3 mismatches, and a scrambled control. We developed a new RT-PCR assay to detect processing of sense, loop, antisense strands from shRNA transcripts. We assessed expression of 86 NF- κ B driven genes and 5 house keeping genes in MOLT-4 shPromA cells. Sequence specific inhibition in HIV-1 (IIIB) replication was evaluated by RT assay.

We confirmed presence of processed double-stranded siRNAs from shRNA transcripts in all MOLT-4 cells by RT-PCR and that confirmed that these were expressed at similar levels in each of the MOLT-4 cell lines. MOLT-4 shPromA did not alter expression of any of the other 86 NF- κ B driven genes including IFN(α 1, β 1, γ). and 5 house keeping genes (β 2M, HPRT1, RPRL13A, GAPDH, β Actin). Sequence specific HIV-1 suppression was achieved only in MOLT-4 shPromA cells.

Our data demonstrate that shPromA induces sequence specific transcriptional silencing in HIV-1 gene, not altering other NF- κ B driven genes. Alteration of IFN (down-regulated by certain RNAs as off-target effects) was not observed in MOLT-4 shPromA cells. MOLT-4 shPromA achieved sustained and highly specific HIV transcriptional gene silencing. Our study demonstrates that transcriptional gene silencing may represent a new therapeutic approach with minimal off target effects from NF- κ B driven genes.

We have previously reported transcriptional gene silencing (TGS) of two retroviruses, simian immunodeficiency virus (SIV) and human immunodeficiency virus type 1 (HIV-1), is induced by promoter-targeted siRNAs, the most potent being si2A and PromA, respectively. Here we examined the co-localisation of Argonaute (Ago) proteins in association with promoter-targeted siRNAs within the RNA-induced transcriptional gene silencing (RITS) complex during TGS of SIV and HIV-1 infection.

Following SIV infection of a HeLa cell line, we co-transfected plasmids expressing FLAG-tagged Ago1, Ago2 or empty vector and AlexaFluor-555 labeled siRNAs; 2A, scrambled control or siRNA targeting Gag via PTGS. HIV-1 strain LAV-infected HeLa cells were co-transfected with the same FLAG-tagged constructs and AlexaFluor-555 labeled siRNAs, PromA, PromA-M2 (mutant) or scrambled control. Cells were fixed, immunofluorescently stained with antibodies to FLAG-tag, Lamin B and nuclear counterstained using DAPI, analyzed by confocal microscopy and Pearson's correlation coefficient (PCC) determined.

Confocal microscopy image analysis revealed Ago1:si2A co-localised in the nucleus of SIV-infected (PCC=0.35), as did Ago1:PromA in HIV-1 infected cells (PCC=0.30), but not uninfected cells (PCC=0.12) ($p < 0.01$), which showed no co-localisation and cytoplasmic localisation. PCCs for Ago1:nuclear and si2A:nuclear co-localisation were significantly greater in SIV-infected cells ($p < 0.03$ and $p < 0.01$, respectively), as was PromA:nuclear co-localisation in HIV-1 infected cells ($p < 0.04$ and $p < 0.02$, respectively) compared to uninfected cells, transfected empty vector, scrambled or gag siRNA controls. Ago2 and si2A co-localised with the nuclear envelope (Lamin B) of SIV-infected, as did PromA in HIV-1 infected cells, with significantly higher PCCs compared to uninfected cells (all $p < 0.01$), empty vector, scrambled or gag siRNA controls, which showed cytoplasmic localisation and no correlation.

This is the first study to directly visualize the cellular localization of Ago1 or Ago2 in complex with siRNA during TGS in SIV and HIV-1 infections. The nuclear co-localization of Ago1:si2A or PromA suggest they are involved in the RITS complex during TGS in a co-ordinated manner, while the retention of Ago2:si2A or PromA on the nuclear envelope may be indicative of a TGS nuclear import mechanism. These data provide direct visualisation of the RITS complex during TGS of retroviral infection.

**Paper Number: 511
SEQUENCE SPECIFIC INDUCTION
OF HIV-1 TRANSCRIPTIONAL
GENE SILENCING TARGETING NF- κ B
SEQUENCES BY SIRNA WITH-
OUT ANY OFF-TARGET EFFECTS
OF OTHER NF- κ B DRIVEN GENES.**

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**Paper Number: 790
PROMOTER-TARGETED SIRNA
COLOCALISES WITH ARGONAUTE
1 AND 2 DURING RNA-
INDUCED TRANSCRIPTIONAL
GENE SILENCING OF RETROVIRAL
INFECTIONS**

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Theme A: Molecular Virology: 1.30pm - 3.00pm

Paper Number: 590

CHARACTERISATION OF HEPATITIS C VIRUS EVOLUTION IN HIV/HCV COINFECTED INDIVIDUALS USING DEEP SEQUENCING TECHNOLOGY: RELEVANCE FOR NEW ANTIVIRAL DRUGS AND DISEASE OUTCOME

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HIV/HCV co-infection is associated with diminished HCV specific T-cell responses and with higher HCV RNA levels. During successful HAART, HCV specific T-cell responses increase and HCV RNA levels decrease. However, HCV can evade the host immune response through accumulation of escape variants. Because little is known about the development of escape mutations in co-infected individuals with onset of HAART, we investigated the influence of increased immune pressure during HAART on HCV sequence evolution, in particular within T-cell epitopes. Furthermore, we examined HCV evolution at known drug-resistance sites to the new anti-HCV drugs.

HCV genotype-1 bulk sequences covering the immunogenic HLA-class-I epitopes (HLA-B*0801, HLA-A*0101 in NS3 and HLA-B*2705 in NS5B) were analyzed in HLA-carriers and in HLA-non-carriers before and during HAART (n=69). To study sequence evolution within these epitopes and the occurrence of drug resistance mutations in quasispecies present at $\geq 1\%$, we performed ultra-deep sequencing using the FLX-454 Roche technology on five subjects before and on HAART.

Bulk sequencing analyses indicated a significant accumulation of immune escape variants in HLA-carriers (16% of sites) compared to non-carriers (only 6%) before the initiation of HAART ($p=0.009$). These mutations were maintained during HAART (HLA-carriers: 8%; HLA-non-carriers: 6%). The emergence of additional escape mutations with the onset of HAART was rare (7% of sites) and reversions of escape mutations were not seen. However, by utilizing the deep sequencing technique, minor quasispecies could be detected in 88% of 225 analyzed amino acid sites. Within the HLA-B*2705 epitope only, mixtures were found in 24 of 105 sites at the nucleotide level that were not found in bulk sequencing. Furthermore, investigating 35 sites associated with drug resistance in the protease and polymerase genes, six drug resistance mutations could be detected with FLX as minority species but not with Sanger sequencing.

In HCV/HIV co-infected individuals, the increase in HCV specific T-cell pressure during HAART appears to have only a modest effect on HCV escape. However, more sensitive sequencing techniques do identify additional escape variants at lower levels in these individuals suggesting changes in the host's immune pressure on HCV following the commencement of HAART. It remains to be determined if these low frequency viral escape species affect overall HCV-specific immune responses or disease outcome. Furthermore, deep sequencing identifies biologically relevant low-level drug resistant mutations in HCV treatment naïve subjects that are not detected by conventional population-based sequencing.

Paper Number: 508

TARGETING HIV-1 REVERSE TRANSCRIPTASE USING FRAGMENT SCREENING

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The human immunodeficiency virus type 1 (HIV-1) reverse transcriptase (RT) converts the viral RNA genome into a proviral DNA precursor. The catalytically active form of the HIV-1 RT is a heterodimer that consists of a p66 and a p51 subunit.

In order to identify novel inhibitors of HIV-1 RT, we have conducted a screen using fragment libraries and saturation transfer difference (STD) nuclear magnetic resonance (NMR). Fragments were screened against the target protein with and without the presence of the nonnucleoside reverse transcriptase inhibitor (NNRTI), efavirenz. Efavirenz is an allosteric inhibitor of the HIV-1 RT that binds to the NNRTI binding pocket and enhances HIV-1 RT dimerization [1].

A total of 630 compounds were screened by STD NMR. Overall, 75% of the fragments bound to RT. Signal intensities of the individual fragments were analysed and categorised as weak, medium or strong. In summary, 50% of fragments that bound to the RT had weak signals, 10% displayed medium signals and 13% displayed strong signals. Of those screened with RT complexed to efavirenz, 65% of the fragments revealed an increase in signal intensity, 12% decreased signal intensity and 21% displayed no change in signal intensity.

Decreases in fragment signal intensity suggests that the fragment is interacting with the NNRTI binding pocket although decreased interaction with other binding pockets cannot be excluded. Increases or decreases in fragment intensity could be attributed to efavirenz's ability to modulate the flexibility of the protein resulting in either the creation or diminution of fragment binding pockets in the RT.

The strong and medium hits from the STD-NMR screen have been tested for their ability to inhibit HIV-1 RT function in a recombinant RT activity assay. Ten compounds have been identified with an IC₅₀ less than 1 mM. Studies are now in progress to determine the binding sites of the most active fragments by co-crystallisation with the HIV-1 RT. These studies demonstrate the identification of fragments that bind to the HIV-1 RT by STD NMR that can potentially act as leads for the development of HIV-1 RT inhibitors.





Theme A: Molecular Virology: 1.30pm - 3.00pm

Human apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G and 3F (hA3G/F) are members of a cytidine deaminase enzyme family. They mutate cytosine (C) to uracil (U) in the minus strand of HIV, resulting in the replacement of guanine (G) by adenine (A) in the plus strand of the virus. The high frequency of A in the HIV genome has been attributed to the G-to-A mutation caused by hA3G/F proteins. We argue here that if the evolutionary pressure from hA3G/F has shaped the HIV genome, it must be evidenced by the imprint of hA3G/F on the HIV genome in the form of under-representation of hA3G/F target motifs and over-representation of product motifs. This hypothesis is backed by the fact that the extent of mutation has been shown to be highly dependent on the type of nucleotides flanking the target G (C in the minus strand). The tetramer motifs TGGG, CGGG and TGGA are preferentially targeted while the tetramers NGGC (N: A, G, C or T) are disfavoured. We studied the frequency of different hA3G/F target and product motifs in the HIV-1 genome using Markov models to assess the under- and over-representation of 2- to 4-mer motifs. It is shown that the highly targeted motifs by hA3G/F are not under-represented. Also the preference patterns of the hA3G/F target motifs do not agree with the representation patterns of the motifs in the HIV-1 genome. It is described that the strong mutagenicity of hA3G/F, that is, their ability to target multiple sites on the same strand provides a possible explanation for the lack of an observed evolutionary pressure from these enzymes. An alternative hypothesis to explain the missing footprint is postulated to be due to the domination of the deaminase-independent inhibition mechanism of the hA3G/F. Evidences for both hypotheses are provided. It is hypothesized that less potent restriction enzymes which exert non-lethal effects on the pathogen genome are more likely to leave their evolutionary footprint compared to the highly potent enzymes with lethal effects.

Paper Number: 168

HAVE APOBEC3G/F LEFT AN EVOLUTIONARY FOOTPRINT ON HIV-1 GENOME?

Ebrahimi D, Davenport MP

Centre for Vascular Research, University of New South Wales, Sydney, Australia

Satellite Session: Young People and Youth Participation – A prerequisite for effective HIV and STI prevention
Sponsored by Department of Health and Ageing: 1.30pm - 3.00pm:

Paper Number: 904
YOUNG PEOPLE AND YOUTH PARTICIPATION – A PREREQUISITE FOR EFFECTIVE HIV AND STI PREVENTION

Ross A, Byron K, Cooper I

Youth Empowerment Against HIV/AIDS

Youth Empowerment Against HIV/AIDS (YEAH) was founded in 2005 as an Australian youth led health promotion organisation dedicated to engaging, educating and empowering young Australians aged 15-29 to lead HIV/AIDS awareness in their local communities. The development and delivery of YEAHs programs are built on the principles of 'youth participation' and 'sharing knowledge through dialogue' as the key determinants that support young people to become agents of positive behaviour change. This session will highlight the importance of linking comprehensive information on youth sexual health with programs designed to provide young people with the knowledge, tools and support to contribute to stopping the spread of HIV and to positively influence community attitudes towards HIV and AIDS. .

The session will be presented by YEAH in partnership with the Department of Health and Ageing and will cover:

Youth Participation and the inclusion of young people as a priority within the Sixth National HIV Strategy, the Second National STI Strategy 2010 – 2013 and links to the National STI Prevention Program, presented by Alischa Ross, CEO YEAH and HIV Strategy EWRG Youth Representative

An overview of the lessons learnt from the Agents of YEAH pilot program, a Youth HIV/AIDS and Sexual Health Peer Education and Leadership Program presented by program manager, Kat Byron.

The development of Red Aware, a public awareness campaign and youth leadership program designed to meet a growing demand from young people wanting to promote HIV/AIDS and sexual health awareness in their communities presented by program manager, Ilana Cooper.

Topics have been chosen to highlight the importance of involving young people at all levels of our national response to HIV, AIDS and sexual health. We strongly encourage delegates to actively participate in the Question and Answer session that will follow the presentations listed above and join us to debate 'Youth Participation as a prerequisite for effective HIV and STI prevention.



Theme C: Regional Issues in HIV prevention: 3.30pm - 5.00pm

The acceptability of female-controlled biomedical prevention technologies such as female condoms or vaginal microbicides have not previously been investigated in Papua New Guinea (PNG). Factors likely to impact on the future uptake and effectiveness of such interventions remain unclear. This study was conducted to investigate intra-vaginal hygiene and menstrual practices (IVP) and their implications for HIV/STI prevention and future vaginal microbicide acceptability in PNG.

A multi-method qualitative research study was undertaken among men and women attending Nine-Mile Sexual Health Clinic, Port Moresby. Participants for in-depth interviews (IDIs) were identified through preliminary focus group discussions with clinic attendees and/or invited to take part by clinic staff on the basis of their unique insights and lived experiences. Women were invited to use copies of a hand-drawn template to indicate how they wash/clean the vulva and/or vagina, and to provide commonly-used, locally-appropriate names for anatomical structures.

A total of 28 in-depth interviews were conducted with women (N=16) and men (N=12). A diverse range of IVP were reported by female IDI participants. The majority of women described washing the vulva only with soap and water as part of their daily routine; in preparation for sex; and following sexual intercourse. Several women described cleaning inside the vagina using fingers and soap at these same times. Others reported cleaning inside the vagina using a hose connected to a tap; use of vaginal inserts (such as crushed garlic for improved genital health or 'virgin soap' for intravaginal tightening); customary 'steaming' practices associated with menstruation and the use of material fragments, cloth, newspaper, baby nappies and sanitary towels to absorb menstrual blood. Unprotected sex during menstruation appeared common and was reported by both men and women.

Intra-vaginal hygiene and menstrual practices are diverse in nature, socio-cultural dimensions and motivators in PNG. The use of soaps, detergents, and other products that may cause vaginal epithelial disruption, and unprotected sex during menstruation, are cause for concern. These factors are likely to be critical to the future acceptability and uptake of vaginal microbicides and other biomedical prevention technologies for HIV prevention in this setting.

Paper Number: 470 **INTRAVAGINAL HYGIENE AND** **MENSTRUAL PRACTICES:** **IMPLICATIONS FOR HIV/STI** **PREVENTION AND FUTURE** **MICROBICIDE ACCEPTABILITY IN** **PAPUA NEW GUINEA**

Sauk J¹, Fiya V², Aeno H², Kupul M², Kelly A^{2,3}, Neo J², Millan J⁴, Fitzgerald L⁵, Kaldor J⁶, Siba P², Valley A^{5,6} on behalf of the Male Circumcision Acceptability and Impact Study (MCAIS) Team

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Clinical trials in Africa have shown male circumcision (MC) reduces the risk of heterosexual men acquiring HIV. Several studies are now investigating MC in Melanesia. In early 2010, a pilot study was conducted on a university campus in Papua New Guinea (PNG) to test methods for a larger study of the acceptability and feasibility of MC for HIV prevention in PNG.

Researchers from Pacific Adventist University, Port Moresby led the pilot on the university campus to test how proposed quantitative and qualitative methods would elicit data on MC practices, and social, cultural and religious understandings of MC. Staff and students of the university were invited to participate in the study by cultural leaders. Self administered questionnaires were distributed in gender specific meetings of cultural groups. Staff and students with unique knowledge and experience about MC were invited for semi-structured interview and/or focus group discussion. Males were invited for clinical examination to assess circumcision status.

A total of 58 males and 38 females completed questionnaires. 14 males and 10 females participated in semi-structured interview and/or focus groups. 13 males presented for clinical examination. 37 males reported some form of penile cutting: 26 some form of longitudinal dorsal slit and 6 complete foreskin removal. 19 of 21 males with no penile cutting stated they were planning to be circumcised. Most men reported having their foreskin cut outside a clinical setting, often by family or friends. Males reported having penile cutting to improve penile cleanliness; because it was a traditional/cultural practice; to prevent HIV or STI; to increase the size of the penis; to enhance sexual pleasure; to allow maternal blood to leave the body; because of peer pressure and to help to be 'a man'. Student leaders emphasized the appropriateness and efficiency of working with cultural groups on campus and recommended this be utilized in future research.

There is a diverse range of reasons and styles of penile cutting in this population. The acceptability of MC appears to be high. Working with cultural groups proved an efficient, effective and acceptable means to engage participants for this study.

Paper Number: 673 **RESEARCHING MALE CIRCUM-** **CISION FOR hiv PREVENTION:** **LESSONS FROM A PILOT STUDY** **at a UNIVERSITY IN PAPUA NEW** **GUINEA**

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¹Pacific Adventist University, Port Moresby, National Capital District, Papua New Guinea; ²James Cook University, Cairns, Queensland, Australia

Theme C: Regional Issues in HIV prevention: 3.30pm - 5.00pm

Paper Number: 464
MORE THAN A CUT:
ACCEPTABILITY OF MALE
CIRCUMCISION FOR HIV
PREVENTION IN PAPUA NEW
GUINEA

Kupul M¹, Kelly A^{1,2}, Aeno H¹, Neo J¹, Naketrumb R¹, Fitzgerald L³, Kaldor K⁴, Siba P¹, Valley A^{3,4} on behalf of the Male Circumcision Acceptability and Impact Study (MCAIS) Team

¹Papua New Guinea Institute of Medical Research, Goroka, Papua New Guinea; ²International HIV Research Group, School of Public Health and Community Medicine, University of New South Wales, Sydney, Australia; ³School of Population Health, University of Queensland, Brisbane, Australia; ⁴National Centre in HIV Epidemiology & Clinical Research, University of New South Wales, Sydney, Australia

Male circumcision (MC) has been shown to prevent HIV acquisition in men in large-scale clinical trials in Africa but the acceptability of this intervention, the socio-cultural context into which it would be introduced, and its potential epidemiological impact remain unclear in other settings. This study investigated the acceptability of MC for HIV prevention among men and women in diverse settings in PNG.

A multi-method qualitative study was undertaken in National Capital District; Eastern Highlands, East Sepik and West New Britain Provinces. Participants were identified by iterative, purposive sampling following interviews with key local stakeholders in each location. Men and women with unique cultural knowledge, insights and lived experiences were encouraged to participate e.g. men who have previously undergone traditional or contemporary penile cutting.

A total of 85 in-depth interviews and 48 focus group discussions were conducted with men and women in four locations. Notional acceptability of MC for HIV prevention was high among men with and without an existing penile cut. Perceptions of the benefits of MC included improved penile cleanliness and genital hygiene; prevention of HIV, genital and sexually transmitted infections; prevention of cervical cancer and improved genital health in women. There were concerns that MC could contribute to gender-based and sexual violence by increasing male sexual pleasure and desire; and that men with MC would perceive themselves as protected against HIV/STIs and stop using condoms. Acceptability was lower among women, the majority of whom expressed concerns that MC would result in a false sense of security among men; was in conflict with prevailing socio-cultural contexts and religious beliefs; could result in complications such as bleeding, scarring or penile deformity; and would provide protection for men only. Many women felt that other preventive measures should first be prioritized.

The acceptability of MC for HIV prevention appears high among men and women in PNG. Perceived levels of protection; risks of condom migration; emphasis on MC compared to other methods of protection; and concerns regarding socio-cultural and religious appropriateness suggest an iterative, phased and locally-contextualized approach will be critical in the event of future large-scale intervention roll-out.

Paper Number: 221
EVALUATION OF A PEER OUT-
REACH PROGRAM TO REDUCE
HIV RISKS AMONG MEN WHO
HAVE SEX WITH MEN (MSM) IN
THAILAND

Manopaiboon C¹, Weerawattanayothin W², Kitwattanachai P³, Lausirikul M⁴, Wangwon, C¹, Kritsanavarin U¹, Pattanasin S¹, Mock P¹, Wolfe M^{1,5}, Prybylski D^{1,5}

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Data from HIV sentinel surveillance indicated a high HIV prevalence among MSM in Thailand. In response, the Thai Ministry of Public Health (MoPH), with support from the Thailand MOPH-U.S. CDC collaboration, implemented a structured peer outreach intervention (POI) program in three provinces (Phuket, Khon Kaen, Udon Thani) of Thailand beginning in 2007. POI provides risk reduction information, condoms, lubricants and voluntary counseling and testing (VCT) and sexually transmitted infections (STI) service referrals. In this analysis, we assessed the effect of repeated POI contacts on HIV risks and health-seeking behaviors among MSM who participated in the program.

The POI program provides a minimum of three contacts to MSM. After each contact, outreach workers recorded socio-demographic, VCT and STI service delivery, and behavioral information using a standardized service delivery form. All participants were enrolled prior to September 2008 and followed-up longitudinally for ≥ 12 months. Analyses were pooled across all three sites. Generalized estimating equations logistic regression analysis was used to assess behavior change, as a function of the number of program contacts, from July 2007 to September 2009. The following potential confounders were adjusted for in the analysis: site and year of enrollment, age, place of residence, education, occupation, and marital status.

Of 3,277 MSM enrolled at the three sites, 40% had > 3 outreach contacts, the median age was 22 years, 95% were single, and 25% reported sex with both men and women. At enrollment, reported condom use during last sex was 62%, correct use of lubricant during last sex was 51%, 'ever' having HIV testing was 25% and 'ever' having visited a VCT/STI clinic was 5%. Statistically significant dose-response increases in condom use, correct use of water-based lubricant, visit to VCT/STI clinics and HIV testing were observed as a function of increasing number of POI contacts over time (P<0.001).

Protective behavior changes were found among MSM who received repeated exposure to POI. MoPH plans to use results from these pilot programs to expand to other geographic areas with MSM nationwide as part of a comprehensive strategy to reduce HIV risks among MSM in Thailand.





Theme C: Regional Issues in HIV prevention: 3.30pm - 5.00pm

Bali Health Office every year since 2000 has conducted HIV-AIDS sero surveys among female sex workers (FSW's). Data from the same population over time can provide insight into trends of HIV prevalence but until now there has been no study which tries to analyze these data; this paper aims to address this issue.

Data were collated from the sero survey database available at the Bali Health Office between 2000 and 2009. Data were obtained from 2628 indirect FSW's working as therapists in more than 20 massage parlours in Denpasar and 2228 direct FSW's working in some low class brothels in the Denpasar area.

HIV prevalence in both types of FSW's has increased significantly especially in direct FSW's. The HIV prevalence among direct FSW's increased constantly from 0.75% in 2000 to 8.84 in 2004 then within the following 5 years the prevalence doubled to 20.50% in 2009. The prevalence of HIV among indirect FSW's increased slightly from 0% in 2000 to 0.34% in 2004 then rising sharply to 6.06% in 2009. Compare to the national data, Bali has recorded the second highest HIV prevalence among FSW's after Papua.

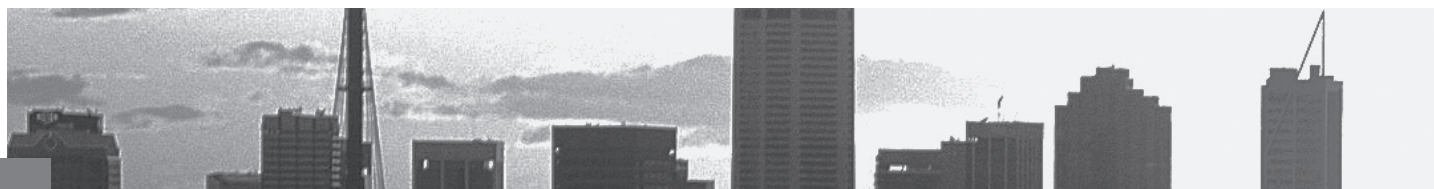
The dissimilar rising trends between direct and indirect FSW's could be influenced by the nature of their work. Findings from some surveys show direct FSW's have more clients than indirect FSW's and the percentages of condom use were higher among indirect FSW's. The increase in HIV prevalence among FSW's indicates that this group may play a significant role in the chain of HIV transmission through heterosexual transmission. The potential wave of transmission of HIV infection from the FSW's epicentre is very worrying; the risk of transmission that occurs between the FSW's and their clients could be a bridge for an epidemic in the general population. Locally adequate and appropriate interventions from all social structures should be conducted soon as a response to the epidemic.

**Paper Number: 514
AN INCREASE IN HIV
PREVALENCE AMONG FEMALE
SEX WORKERS IN BALI; AN
ALARMING SITUATION FOR
AN EPIDEMIC TO GENERAL
POPULATION**

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Theme D: Stigma and discrimination: 3.30pm - 5.00pm

Paper Number: 627
LAWYER, SHADOW LAWYER, AND
LAW STUDENT: WORKING TO-
GETHER, ERASING STIGMA

Larasati A

Community Legal Aid Institute (LBH Masyarakat)

People living with HIV/AIDS (PLHIV) in Indonesia and conceivably elsewhere, have been too often stigmatized as a sinner, wasted individuals, and worse, demons. For years even decades, HIV/AIDS activist have been campaigning to against such stigma, and yet it still occurs nowadays. In Indonesia, apparently, PLHIV and key populations have not been significantly engaged in strategy to address stigma and discrimination as well as convincing the larger society that they can also give positive contribution. Involvement of PLHIV in the effort to erase stigma is thus highly essential. However, how can they play a part if opportunity for them does not exist?

Given the above backdrop, Lembaga Bantuan Hukum Masyarakat (LBH Masyarakat – in English: Community Legal Aid Institute), as a legal aid institute which strongly believes that every single person has a unique potential and ability to do something good, has strived to erase stigma by involving law students as a part of the HIV/AIDS in its community legal empowerment work. This involvement provided opportunity for them to share experiences and know each other better. Law students are assigned to provide a series of law and human rights education for IDU communities. Meanwhile, selected member of IDU communities who are later on trained and recruited as paralegal is trusted to assist lawyers in doing advocacy particularly in drug-related cases. Their role is named as shadow lawyer. Partnership among lawyers, law students, and community paralegal provides a platform of understanding among them. Law students no longer see IDU as useless persons, and IDUs is empowered and could prove that they can contribute positively.

Promoting the work of IDU paralegal is hoped to encourage other parties who share the same dreams: a world without stigma. Together, the bigger the number of community paralegals, and the bigger the number of civil society's involvement, will sooner or later erase stigma against PLHIV and other key affected populations, which ultimately will eliminate discrimination against them.

Paper Number: 780
TRANSACTIONS OF SOCIAL
SUPPORTS WITH HEALTHCARE
PROVIDERS WITHIN THE
PERSONAL NETWORKS OF
WOMEN LIVING WITH HIV IN
AUSTRALIA

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This paper focuses on the exchanges of social supports between women living with HIV in Australia and the health care providers considered important in their everyday lives. As HIV is typically experienced as an episodic, stigmatised and chronic illness, the availability of relational resources is likely to diminish for those living with HIV. Physical health including mortality, of those living a chronic illness is directly linked to the exchanges of social supports and the relational context in which they occur. No knowledge currently exists of the exchanges of social supports as they take place in the personal networks of women living with HIV in Australia.

These findings are drawn from 59 interviews conducted in 3 Australian states with HIV-positive women during 2009 and 2010 as part of PhD research. Each of the participants was asked to nominate the important people in their lives and to recall a number of details of these people: socio-demographic information, the nature of the relationship, exchanges of conflict and the direction, frequency, type and reciprocity of social supports transacted. Socio-demographic data was also collected from each of the women interviewed including indicators of physical health.

462 people were nominated as important by the 59 women interviewed. Network size ranged from between 3 and 12 people with a median of 8 people. Of the 462 nominated people, 15% of these were health care workers at the time of the interview, and 84% of these health care workers are female. In the majority of these exchanges, HIV-positive women reported receiving helpful information (99%) and emotional support (86%). Unlike relationships with friends, family and intimate partners, very few of these exchanges with health care providers were reciprocal.

These findings highlight the social status of women living with HIV in Australia and provide insights into the exchanges of social supports with health care providers from the perspective of HIV-positive women. An understanding of the social supports exchanged in the lives of HIV-positive women, in the context of their personal networks, is considered vital to enable adequate provision of support.





Theme D: Stigma and discrimination: 3.30pm - 5.00pm

There is a gap of information from little research done on issues of men who have sex with men (MSM) who are already HIV-positive. In response, the Asia Pacific Network of People Living with HIV (APN+), with technical support from the Khmer HIV/AIDS NGO Alliance (KHANA), decided to conduct a study among its member community-based organisations (CBO) in 10 countries to document issues facing MSM in the Asia Pacific. To build research capacity necessary for the study, a workshop with country representatives was held in Bangkok, Thailand in February 2010. Using Participatory Action Research methodology, workshop participants trained in research techniques, decided on research questions, and formalised research protocols.

Trained CBO representatives conducted focus group discussions (FGD) in Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, Papua New Guinea, Thailand, and Vietnam in local language. Themes explored include health and treatment, finances, socio-cultural norms, sex and sexuality, and disclosure. FGDs were recorded, transcribed and translated into English for analysis. Each stage of the study was peer-led by MSM living with HIV. FGD participants were required to give signed informed consent and were reimbursed for their time.

While there is great variability in treatment availability and access for MSM across the Asia Pacific region and within countries, some participants have been observed to negotiate better care and support than others. Their success has been found to correlate with three major factors: family support, strength of social networks, and available support from healthcare systems. When all three factors are present, individuals across different cultures are empowered; signified by their ability to seek out better treatment options, negotiate safer sex, disclose their HIV status and overcome perceived stigma. In the event that either of these factors diminishes or fails, individuals tend to accept given treatment, have difficulty with negotiating condom use, hide their statuses and heighten perceived stigma.

Findings indicate that across different cultures there is a similar trajectory in negotiating positive living and care. Beyond availability of treatment, MSM can have better health and social outcomes if they are empowered to build stronger social support structures.

STIs rates are increasing among young people in Australia, but STI testing rates remain insufficient to timely detect and treat most infections. To effectively promote STI testing in young people better insight is needed in the factors that influence their decision to test, including the role of STI-related stigma, attitudes and social norms related to testing.

An online survey launched in May 2010 (www.gettingdowntoit.net) recruited 906 sexually experienced young people living in NSW (Mean age = 20.7 years, range 16-26; 61% female and 39% male). The survey included questions on: socio-demographics, sexuality and sexual risk taking, STI and HIV-testing and potential determinants of the intention to test, including STI-related stigma (15 items, $\alpha=.87$), attitudes towards testing (4 items, $\alpha=.75$), and perceived social norms to test (4 items, $\alpha=.87$). Half of respondents had tested for STIs (37% had both an STI and an HIV test, 14% only had an STI test, 3% only had an HIV test) and most participants (67%) had unprotected sex in the previous six months. Whereas participants reported very positive attitudes towards testing (Mean=4.4/5.0) and perceived a moderately favourable social norm to test (Mean=3.5/5.0), STI-related stigma was also evident (Mean=2.7/5.0) and respondents had a moderate intention to test for STIs in the future (Mean=2.9/5.0). In multivariate analysis, young people who intended to test reported lower levels of stigma and perceived more favourable social norms towards testing for STIs.

Young people are strongly influenced by their perception of what others would think about people who have an STI or test for STIs. Improvement in the promotion of STI testing could be achieved by campaigns and other interventions that address STI-related stigma and provide youth who are thinking about testing for STI, including HIV, with supportive information about the norms of their peers and important others.

Paper Number: 552
NEGOTIATING POSITIVE LIVING:
A 10-COUNTRY STUDY ON IS-
SUES FACING HIV-POSITIVE MSM
IN THE ASIA PACIFIC

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Paper Number: 818
STIGMA AND SUBJECTIVE
NORMS STRONGLY INFLUENCE
YOUNG PEOPLE'S DECISION TO
TEST FOR STIS INCLUDING HIV

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Theme D: Stigma and discrimination: 3.30pm - 5.00pm

Paper Number: 43
SEX WORK, HIV INTERVENTIONS
AND THE SEXUAL ORDER IN
CAMBODIA

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In 1998 HIV prevalence peaked at two percent in Cambodia and has since fallen to an estimated rate of less than one percent among the adult population. UNAIDS credited prevention programs, like the 100% Condom Use Program (100% CUP), aimed at reducing HIV transmission during transactional sex for this fall. They also suggest that Cambodia provides evidence of how prevention efforts can help reverse a country's HIV epidemic.

Based on long-term fieldwork and in-depth interviews with sex workers and managers and local health and law enforcement authorities, this paper explores the effects of this policy on brothel-based sex workers in Sihanoukville, Cambodia. While deploying the rhetoric of 'empowerment', I show how Cambodia's 100% CUP relied on the continued construction of sex workers' bodies as a site of disease and pollution. I also show how the intervention framed the transmission of HIV from sex workers to married women through men. Ultimately, the framework viewed men as a 'bridge' between 'good' and 'bad' women rather than as responsible agents or responsible for their own behaviour.

This paper shows how, despite the best of intentions, some HIV interventions perpetuate the sexual status quo and further compound the stigmatisation and marginalisation of sex workers. Finally, it asks whether the program is an ideal vehicle through which we can promote long-term behavioural and social change for women and men in Cambodia.

Paper Number: 330
VIOLENCE AND HARASSMENT
AGAINST SEX WORKERS IN FIJI
AND THE EFFECT ON HIV PRE-
VENTION

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International HIV Research Group,
University of New South Wales
Australia

While violence and harassment in and of itself does not put sex workers at risk of HIV it does create the conditions in which sexual negotiation and HIV prevention is more difficult. In our recent in-depth study of 40 sex workers in Fiji we found that while all the sex worker participants reported being worried about the possibility of being exposed to HIV, they were preoccupied with more immediate risks and threats than that of HIV when they go out 'looking for money'. Apart from money (which was the thing that concerns them most was violence and whether they will encounter an abusive or violent client or local thugs or harassment from the police.

In this paper we will describe the violence that Fijian sex workers encounter, placing it in the context of the recent Fiji Crimes Decree Part 13, which has further criminalised sex work. We will argue that as sex work in Fiji is driven by economic need, attempts to eradicate sex work through the law will be ineffective and will be detrimental to efforts to reduce HIV transmission risk. A punitive approach to sex workers will drive sex workers underground. It will also foster distrust of government officials and agencies that develop HIV prevention interventions and services.





Theme A: Pathogenesis and immunology: 3.30pm - 5.00pm

During human or simian immunodeficiency infections (HIV/SIV/SHIV), viral load and CD4+ T cell depletion in the acute phase of the disease are good indicators of the level of infection control in the chronic phase. Very high viral load or extensive CD4+ T cell loss in the acute phase often result in failure of immune control later in the course of the disease, and a fast progression to AIDS. It is usually assumed that the loss of CD4+ T cells in early infection prevents the establishment of robust T cell help that is required to control virus in chronic infection.

We tested this hypothesis on viral load and CD4+ T cell number in plasma of SHIV-infected rhesus macaques, some of which had been vaccinated prior to challenge using CD8 T cell-inducing vaccines. Using the receiver-operator characteristic method for evaluation of diagnostic tests, we analysed how well CD4 count or viral load-based measures in chronic and acute phase predict the long-term survival.

We found that, while chronic viral load and CD4 levels were equally good predictors, the acute (nadir) CD4+ T cell depletion appeared a better predictor than peak viral load. The animals having >95% depletion of CD4+ T cells in early infection progressed to severe disease, while animals with >5% preserved CD4+ T cells experienced CD4+ T cell recovery.

We derived a simple universal relationship between the target cell nadir and chronic level. This relationship allows us to determine if virus control has deteriorated between the acute and the chronic phase. We found that, when nadir CD4 depletion was below survival threshold, CD4 T cells were approximately 20% more depleted late in the infection than we would expect with constant level of virus control. This suggests that severe CD4 depletion in acute phase indeed impairs the immune response.

Multiple studies have shown that the HIV viral reservoir is chiefly made up of resting memory CD4+ T cells containing replication competent provirus. It has recently been reported that the majority of early CD4 T cell depletion occurs in gut-associated lymphoid tissue (GALT), suggesting most viral replication occurs in these tissues. Peripheral blood memory CD4 T lymphocytes consist of 2 main subsets, gut-homing which have integrins $\alpha 4\beta 7$ and recirculate through the GALT, and non-gut-homing which have integrins $\alpha 4\beta 1$ and have no access to the GALT. We tested the hypothesis that $\alpha 4\beta 7+$ CD4 T cells are preferentially infected with HIV DNA during chronic HIV infection (CHI).

CD4 T cells were isolated by negative selection from leukopheresis packs from 8 patients with untreated chronic HIV infection (CHI). These were further sorted into highly purified subsets of CD3+CD4+CD45RO+ cells: $\beta 7+$ vs $\beta 7-$; CD25+CD127dim Treg vs CD127high; CD27+ vs CD27-; and CD38+ vs CD38- subsets. Total DNA was extracted from each cell subset for each patient and quantified for total HIV DNA copies by real-time PCR.

It was found that approximately 90% of HIV DNA copies in PBMCs were in CD3+CD4+CD45RO+ memory cells within our study population. Further subdivision of these memory CD4 T cells into subsets showed that approximately 83% of HIV DNA resided in the $\beta 7$ -non-gut-homing cells. 7% of HIV DNA was found in the highly purified Tregs with the majority located in CD127high cells, only 8% was found to be in CD38+ activated memory cells, while 28% of HIV DNA was situated in effector memory CD27- cells.

Our results confirm that resting memory CD4+ T cells make up the HIV reservoir and further show that non-gut-homing memory CD4 T cells with a resting CD127highCD38-CD27+ phenotype make up the majority of this reservoir in chronic HIV infection. These cells have been previously shown to recirculate preferentially through the secondary lymphoid tissue, but lack access to the GALT. These results have important implications for therapy targets and regimens where the reservoir is concerned.

Paper Number: 459
SIMIAN-HUMAN IMMUNODEFICIENCY VIRUS – IS THE COURSE SET IN THE ACUTE PHASE?

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Centre for Vascular Research, University of New South Wales, Sydney Australia

Paper Number: 440
MAJORITY OF HIV DNA IN THE HIV RESERVOIR LOCATED IN THE NON-GUT HOMING RESTING MEMORY CD4+ T CELL SUBSET.

McBride K¹, Xu Y¹, Bailey M¹, Seddiki N¹, Suzuki K², Murray J³, Cooper DA^{1,2}, Kelleher AD^{1,2}, Koelsch KK^{1,2}, Zaunders J²

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Theme A: Pathogenesis and immunology: 3.30pm - 5.00pm

Paper Number: 187
CAN IMMUNE-RELATED GENOTYPES ILLUMINATE THE IMMUNOPATHOGENESIS OF CMV DISEASE IN HIV PATIENTS?

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This study investigated genetically determined variations in chronic immune activation, co-stimulatory molecule expression and/or regulation of cytokine production, which may affect CMV disease in HIV patients. In Australian HIV patients, CMV disease has been associated with the 44.1 ancestral haplotype (HLA-A2, B44, TNFA-308*2, BAT1(intron10)*1, DR3) and homozygous for carriage of the wild-type allele of IL12B3'UTR (rs3212227, A/C).

DNA samples were collected from two hundred and fifty two (252) patients who attended the University Hospital/Case Medical Center, Cleveland, Ohio, USA, between the years 1993-2008. Viral load, CD4+ T-cell counts and nadirs were also collected. 78 of these patients (African Americans=41, Whites=37) experienced CMV disease before ART and 162 control patients (African Americans=114, Whites=48) presented with similar baseline CD4+ T-cell count and no history of CMV disease. Genotypes were determined using allele-specific fluorescent probes. Analysis was performed via Fisher's tests using Graphpad Prism v5. This sample set was used to link cytokine genotypes with attainment of extremely low baseline CD4+ T-cell counts and CMV disease.

Carriage of the variant allele of IL12B3'UTR and carriage of the wild-type allele of SLC11A1 D543N (rs17235409, G/A), were significantly associated with a decreased incidence of CMV disease in African American patients (p=0.04, OR=0.46; p=0.02, OR=3.31 respectively). Carriage of the wild-type allele in IL10-1082 (rs1800896, G/A) was marginally associated with an increased incidence of CMV disease in white patients (p=0.09, OR=2.57). Analyses of allele association with baseline CD4+ T-cell counts will be presented later.

The solute carrier family 11 member 1 (SLC11A1), formerly NRAMP1, gene encodes a multi-pass membrane protein and controls immune reactions to intracellular pathogens. The protein functions as a divalent transition metal (iron and manganese) transporter involved in iron metabolism and controls natural host resistance to infections with intracellular parasites. It has important roles in macrophage activation (macrophage-specific membrane transport function) and has been associated with human tuberculosis infection. Mutations in this gene have been associated with susceptibility to infectious diseases such as tuberculosis and leprosy, and inflammatory diseases such as rheumatoid arthritis and Crohn's disease. Hence, associations with the above polymorphisms may place the gene or one in linkage disequilibrium with it on the path to the disease and should be investigated further.

Paper Number: 409
PROGRESSIVE ACTIVATION OF CD127+132- RECENT THYMIC EMIGRANTS INTO TERMINALLY DIFFERENTIATED CD127-132+ T-CELLS IN HIV-1 INFECTION

Sasson SC^{1,2}, Zaunders JJ², Seddiki N^{1,2}, Bailey M^{1,2}, McBride K^{1,2}, Koelsch KK^{1,2}, Smith D¹, Cooper DA^{1,2} and Kelleher AD^{1,2}

¹National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney Australia;

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HIV infection is associated with down-regulation of the interleukin-7 receptor α -chain (IL-7R α ; CD127) but not the cytokine common γ -chain (CD132) from the surface of T-cells. Specifically, progressive infection results in a loss of CD127+132- and reciprocal gain in CD127-132+ CD4+ and CD8+ T-cells. This results in impaired T-cell survival, proliferation and cytotoxic activity. Our previous work shows that these changes do not reverse after 10 months of antiretroviral therapy (ART). Here we further study these subsets of T-cells to investigate how HIV infection and IL-7R expression relates to the relative size of T-cell populations based on functional phenotype.

Peripheral and cord blood mononuclear cells (PBMCs;CBMC) from healthy volunteers and PBMC from patients with primary and chronic HIV infection were studied. CD127+132-, CD127+132+ and CD127-132+ T-cells were phenotyped on the basis of activation (CD25, CD27,CD28 and CD95) differentiation (CD45RO vs CCR7), proliferation (Ki-67) and survival (Bcl-2). Cellular HIV-DNA content and signal-joint T-cell receptor excision circles (sjTRECs) were measured.

CD127+132- T-cells were enriched for naïve cells, while CD127-132+ T-cells were enriched for activated and terminally differentiated T-cells in both CD4+ and CD8+ niches in both health and HIV infection. HIV infection expanded the proportion of activated and terminally differentiated CD127-132+ T-cells. In contrast to CD127+132- T-cells, CD127-132+ T-cells were Ki-67+Bcl-2low and contained high amounts of HIV-DNA, suggesting that they are short-lived. The naïve CD127+132- T-cells were enriched in cord blood and contained higher proportion of sjTRECs.

HIV infection is associated with a progressive activation of CD127+132- recent thymic emigrants into CD127-132+ activated and terminally differentiated cells that are vulnerable to HIV infection and destined to be short-lived. This is likely due to ongoing antigen exposure and may synergise with elevated circulating IL-7 levels. This results in a net loss of CD127 that is not easily reversed following ART and marked distortion of T-cell homeostasis.





Satellite Session: A new dawn? - Victoria's response to troubled times: 3.30pm - 5.00pm Sponsored by Department of Health, Victoria

Introduction: Evidence for the effectiveness of social marketing for HIV/STI prevention is mixed. There is also debate about the most appropriate outcomes to assess interventions and the time needed to measure changes in these outcomes. We evaluated HIV prevention social marketing campaigns run by Victorian AIDS Council/Gay Men's Health Centre in Victoria assessing knowledge, health seeking and risk behaviours, campaign recognition, and community dialogue.

Methods: We surveyed and held focus groups with an online cohort of men who have sex with men (MSM) three times over 12 months using a rolling recruitment method during 2008-2009. We compared HIV testing rates and assessed trends in HIV/STI testing in four high MSM caseload clinics using time-series regression and changes in online survey responses using matched proportion tests.

Results: Over 450 MSM participated; 245 men completing the final survey (197 HIV-negative, 22 HIV-positive); 91% recalled at least one HIV prevention campaign. Among those recalling campaigns, there were significant changes in reported frequency of health seeking behaviours; requesting HIV tests from doctors (15% v 23%, $p=0.04$) and searching for sexual health information (16% v 23%, $p=0.04$). Significant increases in knowledge ($p<0.01$) and community dialogue around sexual health ($p<0.01$) were measured. No significant changes were detected in reported frequency of risk behaviours. Surveillance data from clinics revealed an increase of an average 15 tests per quarter ($p<0.01$) across Jan 2007-Jun 2009 among HIV negative MSM for HIV, syphilis and chlamydia testing. Participants reported that the public placement, sexual explicitness and clear and effective messages were key factors to the campaigns success in reaching and engaging gay men. Men also reported the campaigns helped normalise sexual health testing and sexual health discussions among the gay community.

Conclusion: We found changes in campaign recall, awareness, community dialogue and health seeking behaviour over the life of the campaigns. These have been the most successful social marketing campaigns in Victoria to date. Program planners should ensure they establish appropriate aims and consider appropriate outcomes to assess campaign effectiveness. Campaign planners must ensure campaigns have appropriate aims, are engaging, have clear messages and provide new information to the target audience.

Paper Number: 919
THE EFFECTIVENESS OF SOCIAL MARKETING CAMPAIGNS IN CHANGING HIV/STI-RELATED BEHAVIOUR AMONG GAY MEN IN AUSTRALIA.

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Continuing high rates of STIs and ongoing transmission of HIV in the context of relatively high rates of risk behaviour among particular groups of gay men, often described as sexually adventurous, pose specific challenges for HIV-prevention.

The Sexually Adventurous Men's (SAM) project is a joint activity of the Victorian AIDS Council and PLWHA (Victoria), funded by the Victorian Department of Health, to work specifically within sexually adventurous men's networks in Melbourne. A research component, being conducted by ARCSHS and NCHECR, of this work is documenting the challenges and achievements of this project while simultaneously describing SAM networks and issues raised within these networks.

While the SAM project has an overall goal to reduce risk behaviour and infections within this population, the SAM project has been established on a community development model, with staff selected for their personal and professional capacity to work within this framework. The education task is secondary to the task of working with, and within, SAM networks, to develop the capacity of men within these networks to articulate the needs, and preferences, of SAM, while enabling them to make their own decisions about appropriate ways to reduce risk. As such, the development of educational resources and campaigns is not the primary focus of this project. In the SAM project, the process is often as important as the product.

We will report on the challenges and achievements of the SAM project to date, including a description of how work on the project has proceeded and how it has been received by SAM themselves.

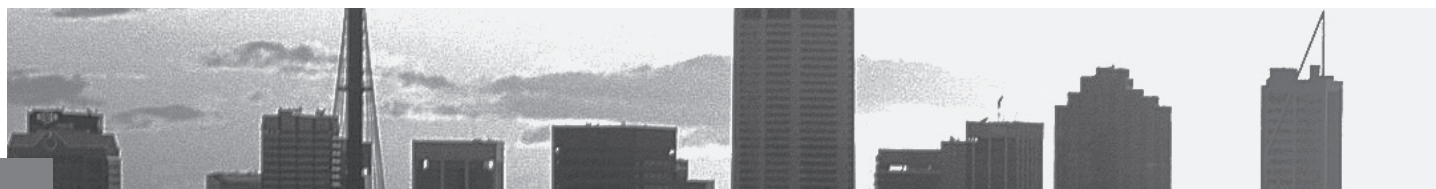
This is a unique and groundbreaking project, working with a challenging, and potentially controversial, population. Documenting this work will provide an opportunity for the development of similar work elsewhere, and within other contexts.

Paper Number: 920
WORKING WITH SEXUALLY AD-VENTUROUS MEN

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Satellite Session: A new dawn? - Victoria's response to troubled times: 3.30pm - 5.00pm Sponsored by Department of Health, Victoria

Paper Number: 921

**WHERE HAVE ALL THE MEN
GONE? REACHING GAY MEN FOR
SEXUAL HEALTH PROMOTION
VIA SOCIAL NETWORKING SITES
WITH ITERATIVE EVALUATION
METHODS.**

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Social networking sites offer a novel environment for health promotion due to their popularity, interactivity and potential to engage and create communities. However few health promotion interventions have been trialled in these spaces.

The FaceSpace Project uses fictional characters interacting on social networking sites to deliver sexual health promotion to key at-risk groups; young people and gay men. Separate characters to target each population were developed in collaborative workshops with actors and participants from the target audiences. The characters use videos, photos and dialogue to deliver a narrative about their social activities on social networking sites over four-five months. Health promotion messages are embedded in this content.

The characters targeting young people were developed first and interacted online from November 2009-April 2010. Experiences from the youth arm informed the development of the gay men's arm. Changes included a 'soap-opera' style episodic format and a centralised page to enhance interactivity and dialogue with users. 'Queer As F**k' was launched in April 2010 and to date has over 1,250 Facebook fans.

To evaluate the project, we adapted and combined evaluation methods from the health promotion, information systems and creative spheres. A mixed methods approach, incorporating computer laboratory tests, site usage data, online surveys, user diaries, and on- and off-line focus groups, is being used to evaluate the project. Successes to date include over 5105 unique page views, 1340 individual video views and 280 page interactions. The pages has attracted fans from all over Australia (89%) and overseas (11%) and has received recognition through local media outlets, bloggers and various gay community organisations.

This project offers a new model for delivering health promotion interventions using social networking sites. We will present our lessons learnt on how to develop and implement a collaborative, adaptive and interactive online intervention in a new and challenging environment.





Satellite Session: A new dawn? - Victoria's response to troubled times: 3.30pm - 5.00pm Sponsored by Department of Health, Victoria

Introduction: This paper describes a study about partnerships in the BBV/HIV prevention sectors commissioned by the Prevention and Population Health Branch of the Victorian Department of Health. The paper presents and analyses the results of a needs analysis of the partnerships between twenty-four organisations that work together to prevent transmission of blood borne viruses, particularly HIV and hepatitis C.

Methods: Victorian organisations involved in the prevention of blood borne viruses were engaged to identify the needs of partnering. Felt needs were determined through focus groups with representatives from the sector agencies. A survey was used to collect data for the expressed needs analysis about the agencies' expectations of partnering. Comparative needs were identified by conducting telephone interviews with major agencies in other states of Australia. Literature from Australia and overseas was reviewed for the normative needs analysis.

Results: There was a high level of agreement among participants of the focus groups and the representatives of the interstate agencies about the characteristics of healthy partnerships. Respondents tended to indicate that formalised partnerships were more effective, although there was some discussion about the merit of informality in some situations. The survey revealed patterns in relationships between the agencies that were sometimes at variance with the principles espoused in the focus groups, particularly with respect to the degree of formalisation. In contrast with these results, the key finding from the literature review was that there is no best form of partnership. High performance would be expected when the extent of formalisation and integration are aligned with the purpose of the partnership, the environment in which the partnership operates and the characteristics of the partners.

Recommendations: We recommend a contingent model for partnerships, covering formalisation and integration mechanisms. The level of formalisation depends on the environment and the partnership. For example low formalisation is appropriate if the environment is changing rapidly, whereas high formalisation may be required if there are many funding bodies. The type of integration depends principally on the purpose of the partnership. For example unsophisticated integration is appropriate when the purpose is not complex. Sophisticated integration is appropriate when the purpose is complex or the services are delivered to diverse communities.

Conclusion: The implementation of the contingent model described in this paper is expected to result in improved performance of partnerships for the prevention of HIV and hepatitis C in Victoria.

Paper Number: 922
IMPROVING THE EFFECTIVENESS
OF PARTNERSHIPS FOR THE
PREVENTION OF BLOOD-BORNE
VIRUSES

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ashm

Australasian HIV/AIDS Conference 2010

22nd Annual Conference of the Australasian Society for HIV Medicine
Sydney, 20-22 October 2010

Wednesday 20 - Friday 22 October 2010
Sydney Convention and Exhibition Centre, Darling Harbour, Sydney

**ORAL PRESENTATION
ABSTRACTS
FRIDAY 22 OCTOBER 2010**

Case Presentation Breakfast: 7.00am - 8.45am

The incidence of HIV associated multicentric Castleman's disease is increasing. The mortality of Castleman's disease is high even with chemotherapy. Australian data suggest mortality rates of 45% with a median survival of 21 months. However, recent case series of therapy with rituximab (a chimeric monoclonal antibody against CD20) have yielded promising results. We report a case of multicentric Castleman's disease treated with rituximab monotherapy in a man with recent HIV infection.

A 39 year old man was diagnosed with HIV infection in 2009 with an evolving western blot. He was asymptomatic at the time but sought testing due to contact with a HIV positive partner. Five months after diagnosis he was immunodeficient with a CD4 cell count of 280/ μ L and a HIV viral load of 100,000 copies/mL. He commenced therapy with tenofovir, emtricitabine and efavirenz and had a prompt virologic response.

In early 2010 he presented with a two week history of transient maculopapular rash, fevers and fatigue. On clinical examination he was febrile at 39 degrees C with widespread bulky lymphadenopathy and splenomegaly. There were no oral or cutaneous Kaposi's sarcoma lesions. Investigations revealed moderate thrombocytopenia (94×10^9 /L), normal renal function and mild mixed liver function abnormalities. A CT scan of the chest, abdomen and pelvis demonstrated bulky lymphadenopathy involving the mediastinal, axillary, supraclavicular, intrabdominal and inguinal chains. An axillary lymph node biopsy was consistent with the plasma cell variant of Castleman's disease with positive immunostaining for human herpes virus-8 (HHV8). HHV8 was detected by PCR in peripheral blood.

The patient completed four cycles of rituximab therapy with complete resolution of his initial symptoms and partial resolution of lymphadenopathy. The HIV viral load remained undetectable and the CD4 count rose to 480/ μ L.

As a lymphoproliferative sequelae of HHV8 infection, multicentric Castleman's has previously been treated with cyclophosphamide based chemotherapy. More recently, case series of rituximab in combination with antiretroviral therapy have shown up to 95% 2-year survival rates.

The role of rituximab therapy in patients with HIV associated multicentric Castleman's disease will be discussed.

Paper Number: 382
CASTLEMAN'S DISEASE IN
A MAN WITH RECENT HIV
SEROCONVERSION: TREATMENT
WITH RITUXIMAB

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Case Presentation Breakfast: 7.00am - 8.45am

Paper Number: 379
WHEN ONE ISN'T
ENOUGH: SUCCESSFUL
TREATMENT OF CONCURRENT HIV
AND EBV ENCEPHALOPATHY

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A 48 year old woman with longstanding HIV presented with an acute deterioration in neurological function following a 12 month period of progressive subtle cognitive decline. This deterioration was characterised by depressed mood and anxiety, decreased attention, memory impairment and resting tremor. Her symptoms led to a number of falls, a minor motor vehicle accident and an inability to maintain employment.

This neurological dysfunction occurred on a background of low level plasma viraemia (HIV RNA - 500 copies/ml) with a preserved CD4+ cell count of 1078 cells/ μ l (CD4+% - 35%, nadir CD4 cells of 210/ μ l in 1994), on an antiretroviral regimen of Didanosine, Lamivudine, and ritonavir-boosted Atazanavir.

She underwent extensive investigation including neuropsychological assessment and sequential MRI Brain scans which demonstrated widespread white matter signal change with restricted diffusion, a pattern reported as atypical for HIV encephalopathy. Cerebrospinal fluid (CSF) examination was remarkable for an elevated total protein level 1.13g/L, 24×10^6 /L lymphocytes, with no detectable polymorphonuclear cells and a CSF HIV viral load of 7,000 copies/ml. EBV DNA was detected by RT-PCR and she underwent a stereotactic cerebral biopsy which demonstrated a meningoencephalitis with perivascular and parenchymal lymphocytic infiltrates and scant cells that were immunoreactive with EBV, EBV PCR was positive on the tissue.

The antiretroviral regimen was changed to Raltegravir, Etravirine, Lamivudine and ritonavir-boosted Darunavir, to maximise CNS penetration and cover pre-existing HIV resistance. She also commenced oral valganciclovir for treatment of EBV encephalitis and made significant rapid symptomatic improvement, with normalisation of CSF and MRI studies, undetectable CSF and plasma HIV viral load, and a return to her previous level of function with only mild residual deficits.

EBV encephalitis is extremely rare, and has not been reported in the setting of HIV-associated neurological disease. This case highlights the importance of thorough investigation and management of neurological impairment in HIV positive patients.

Paper Number: 772
FOCAL SEGMENTAL
GLOMERULOSCLEROSIS IN
A MAN WITH LONG TERM
NON- PROGRESSIVE HIV
INFECTION WITH END STAGE
RENAL FAILURE: CHALLENGING
TREATMENT DECISIONS

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A 38 year old Caucasian man with long term non-progressive HIV-1 infection (CD4 count >500 cells/ μ L and HIV Viral Load <1000 copies/ml for greater than 10 years) developed slowly progressive renal failure with significant proteinuria. He had no prior treatment for HIV-1 infection and no traditional risk factors for renal disease.

In 2000 he developed peripheral oedema and had persistent proteinuria despite treatment with an angiotensin converting enzyme inhibitor. A renal biopsy at that time revealed mixed focal and global glomerulosclerosis with areas of hyalinosis. There was diffuse interstitial fibrosis with tubular atrophy consistent with focal segmental glomerulosclerosis (FSGS).

Although the biopsy was not characteristic of HIV associated nephropathy (HIVAN), the possible association of HIV infection and FSGS was recognised. The patient did not commence combination antiretroviral therapy (cART) although it was considered. Following an acute deterioration in renal function in 2003 he commenced haemodialysis. In 2007 he presented with a two week history of exertional chest pain and coronary angiography revealed significant coronary artery disease necessitating urgent coronary artery bypass grafting. At this stage cART was commenced to facilitate renal transplantation with a triple nucleoside regimen. A regimen comprising of zidovudine, abacavir and lamivudine was commenced with an excellent virological response. Although not recommended as a first line combination for cART, this regimen was chosen as it is associated with less drug interactions in renal transplantation.

A successful cadaveric renal transplant took place the following year, although there was mild persistent graft dysfunction. Following the emergence of data possibly associating the use of abacavir with myocardial infarction his therapy was changed to raltegravir, zidovudine and lamivudine.

This case raises several interesting issues: the association of HIV infection in non-progressive disease and FSGS (a possible forme fruste of HIVAN); indications for cART in HIV with non-progressive surrogate markers; and optimal cART choice for patients requiring renal transplantation.





Case Presentation Breakfast: 7.00am - 8.45am

This case is of a middle aged HIV positive man with an unusual presentation of disabling, bilateral, ankle pain; subsequently found to be due to multiple fragility fractures.

The patient is 53 yr old man who was diagnosed HIV positive 10 yrs ago. His nadir CD4 count was 280 and he commenced combined antiretroviral treatment (CART) with lamivudine, zidovudine and indinavir in April 2000. The regimen was changed to tenofovir, emtricitabine and efavirenz in June 2006. His HIV infection remained well controlled with CD4 counts of 600-800 and a fully suppressed HIV viral load.

He has complained of chronic ankle pain on weight bearing for the last 12 months, with no history of trauma. No other joints were involved and he did not have any constitutional symptoms. Later examination showed mild effusion and synovitis of the ankle joints, but X-ray showed no significant pathology and joint aspirate was also normal. Multiple non steroidal anti-inflammatory drugs (NSAID) were tried to control the pain. At this point he developed deteriorating renal function with low phosphate and proteinuria. This was thought due to tenofovir and NSAID renal toxicity. Tenofovir was ceased and his renal function improved.

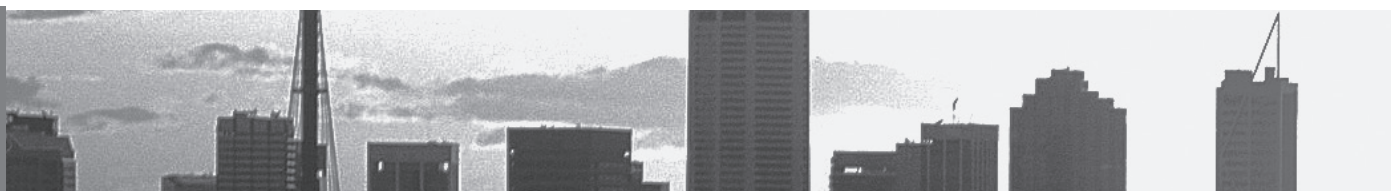
The joint symptoms worsened over the last 3 months and he could not mobilise due to pain. A trial of sulfasalazine and short course of oral corticosteroids were tried without benefit. Repeat X-ray showed no significant changes but an MRI showed multiple insufficiency fractures in the distal tibia, calcaneal and talus bones. There was no evidence of avascular necrosis or inflammatory arthropathy and the ligament structures were intact.

This case illustrates unusual fragility fractures, secondary to severe bone disease, in HIV. This has caused significant disability and pain and presented a management challenge. This patient had many traditional risk factors for osteoporosis including poor diet, low BMI, physical inactivity, heavy smoking and ethanol use. The long standing HIV infection and some medications including tenofovir and indinavir may have contributed to the development of bone disease and this will be discussed during the presentation.

Paper Number: 165
UNUSUAL FRAGILITY FRACTURES
IN CHRONIC HIV INFECTION

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Theme D: Social and Cultural Aspects of HIV: 11.00am - 1.00pm

Paper Number: 519
A CHANGING EPIDEMIC? HIV
AND SUB-SAHARAN AFRICANS IN
AUSTRALIA

Sergeant J.

Australian Federation of AIDS
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Australia
The HIV epidemic in Australia

historically has been primarily among gay men. While this continues to be the case, there are indications of an increase in diagnoses among other populations, which present new and different challenges for policy, health promotion and service providers.

In 2008, diagnoses in people born in sub-Saharan Africa constituted 9.5% of total HIV diagnoses in Australia, up almost 3% from the previous year. Australian HIV surveillance data also indicates a higher per capita rate of HIV than in other population groups since country of birth has been collected for new diagnoses. HIV agencies have also been seeing an increase in the number of Africans living with HIV accessing their services.

This presentation will give an overview of recent data and the key issues related to HIV care, support, awareness and prevention with people born in sub-Saharan Africa. It will also provide an update on how the Australian Federation of AIDS Organisations is supporting the development of an African community response to HIV.

Paper Number: 347
SEXUAL NETWORKS AND
HIV AMONG MONEY BOYS IN
NORTHEAST OF CHINA

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Men who sell sex to men, termed 'money boys' in China (MB), are a group vulnerable to HIV. The inner complexity of their lives, including their sexual orientation, occupational identity, work organization, mobility, and the variety of sexual services they offer is neglected by Chinese mainstream HIV research. This paper focuses on the underlying social and cultural forces that shape MB's same-sexual networks in northeast China, and identify their increasingly high HIV risk.

45 MB from three provinces in northeast China who were working in a variety of home-based brothels, gay bathhouses, gay bars, public parks and squares were recruited. 5 venue bosses were recruited from home-based brothels and gay bathhouses. As well as participant observation over one year, semi-structured interviews were undertaken to demonstrate same-sexual network's characteristics, and to analyze the relationship between this network and HIV risk transmission.

MB's sexual identities were complex, and this determined the relationship with bosses and gay clients. Hidden same-sexual networks were constructed through differing relationships between venue categories, organizational management, service types and mobility routes. Leading risk factors associated with HIV varied in different networks and contexts: we found heterosexual MB and transgender MB were more commonly the higher-risk receptive partner with clients. HIV-positive cross-dressing MB assumed the identity of female sex workers to perform sexual acts with rural mobile workers.

The HIV epidemic among MBs is shaped by the economic, social and cultural forces of rapid change in contemporary China. HIV prevention and intervention efforts require detailed knowledge about same-sexual networks: demographic, behavioral, economic, political and cultural determinants, all of which have critical implications for the patterns of HIV distribution. Various HIV intervention strategies should be scaled up: incorporating the "key persons" from these networks; targeting bosses at venues to negotiate safe sex acts for MBs with clients and provide sexual health training for new MBs; mobilizing experienced cross-dressing MB to implement peer education and improve condom usage.





Theme D: Social and Cultural Aspects of HIV: 11.00am - 1.00pm

Non condom-based risk reduction strategies rely on knowledge of HIV status to be effective. We investigated how Australian gay men disclose HIV status in sexual Pleasure and Sexual Health was an online survey of 2306 Australian gay men recruited during mid-2009.

The majority of men (66.2%) were not told their casual partner's HIV status on occasions when a condom was used, but this was true of only 48.2% of men when a condom was not used. The proportions of men who did not disclose their own HIV status on these occasions were similar (63.2% and 45.7% respectively). Among those who did learn their partners' HIV status, regardless of whether a condom was used, they were about equally likely to have been told their partners' HIV status prior to that occasion as on that particular occasion. Relatively few learned their partners' HIV status from their online profiles (7.8% and 4.2% respectively). Regardless of whether they had discussed HIV status, or whether a condom was used, well over 80% of men believed their partner on this occasion was seroconcordant. 28.0% of men on occasions when a condom was used were very confident of their partner's HIV status, as were 41.2% of men on occasions when a condom was not used.

Among men who choose to use condoms, disclosure of HIV status is not the norm, but among men who decide not to use condoms, disclosure of HIV status only occurs on about half of those occasions. Presumptions about HIV seroconcordance appear to be relatively common. If gay men who choose not to use condoms on specific occasions are unwilling or unable to return to condom use then disclosure of HIV status will need to become far more commonplace.

**Paper Number: 444
DISCLOSING HIV STATUS TO
CASUAL PARTNERS**

Garrett Prestage^{1,2}, Ian Down^{1,2}, Jack Bradley¹, Graham Brown³

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²Australian Research Centre in Sex Health and Society, La Trobe University;

³Curtin University

Theme D: Social and Cultural Aspects of HIV: 11.00am - 1.00pm

Paper Number: 213
THE EXPERIENCE OF LIVING WITH
HIV FOR HETEROSEXUAL MEN IN
AUSTRALIA

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²Community Health Promotion Services, Western Australian AIDS Council, Perth, WA, Australia.

Over the past decade, Australia has witnessed a progressive increase in the number of new Human Immunodeficiency Virus (HIV) diagnoses, particularly amongst heterosexual men. While a considerable body of research has examined the experiences and service needs of HIV positive gay men, injecting drug users and women, there is a paucity of research examining the experiences of heterosexual men who are HIV positive. This paper presents the results of a phenomenological study which aimed to explore the experience of living with HIV for heterosexual men. In-depth interviews were conducted with five self-identifying heterosexual men who were HIV positive. Thematic analysis of interview data revealed three main themes in participants' experiences: shock at receiving a positive diagnosis, struggling to accept and deal with positive diagnosis, and learning to live with HIV. The findings highlight the uniqueness of the experience of living with HIV for heterosexual men and support the need for more targeted services to be developed for these men. Knowledge gained from this study will further guide decisions for service providers, policy makers, and health professionals concerned with meeting the needs of heterosexual men living with HIV. It will also assist heterosexual men themselves in understanding how to live with HIV.

Paper Number: 618
EMPOWERING PRISONERS
IN HEALTH THROUGH
COMPLEMENTARY APPROACH

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Yayasan Taman Sranganis, Jakarta, Indonesia

Yayasan Taman Sranganis (YTS) is a foundation of traditional healing that has participated in HIV program in prisons settings since 2007 with support from AUSAID through Indonesia HIV Prevention and Care Project (IHPCP) and HIV Corporation Program for Indonesia (HCPI). For the last 2 years, YTS has intensified their program in 4 prisons in the greater Jakarta area.

YTS has a unique approach for providing services in prisons. Whilst other services rely on clinical officers to reach prisoners, YTS encourages prisoners to learn about their health and find ways to take care of themselves despite their surroundings. The YTS program includes:

- a) Training for prisoners to become volunteers, therapists and trainers
- b) Regular acupressure, meditation and pranic breathing exercises
- c) Peer support groups (PSG)

The results so far:

- a) Training of 22 volunteers, 8 acupressure/pranic healing therapists, 2 acupressure trainers and 6 pranic trainers
- b) 208 prisoners have joined regular health exercises on meditation/pranic and acupressure run by prisoners and supervised by prison staff
- c) Complementary clinics established in two prisons operated by trained prisoners, accessed by 382 prisoners
- d) Three PSGs have been established

Prison staff and doctors report the program is effective in reaching prisoners and makes providing health care easier. HIV positive prisoners appreciate the holistic skills to take part in managing their own health while incarcerated.

This program not only helps to improve the health quality of prisoners but also creates a situation where prisoners are able to help each other. Whilst access to ARV in prison remains challenging, the learning of acupressure and meditation, and getting support and information, prisoners are able to feel more hopeful despite the harsh environment.

Theme D: Social and Cultural Aspects of HIV: 11.00am - 1.00pm

Developing appropriate care and treatment services for HIV-infected children in a low-prevalence setting is challenging. HIV-infected children and their caregivers need comprehensive psychosocial support and focused adherence support to improve health outcomes and keep them in care. Adherence to ART is optimized and loss to follow up minimized when services are provided to children and care-givers close to home.

FHI, supported by USAID-PEPFAR, worked with the MoH, provincial AIDS authorities, and district hospitals to establish pediatric HIV CT sites in six district-level hospitals in Vietnam using a family-centered care (FCC) approach. Extensive psychosocial and adherence support, including regular assessment and support for adherence in the home is provided to children by a multidisciplinary team, including home-based teams, PLHIV support groups, adherence counselors, and the FCC case manager. All are trained to provide age- and developmentally appropriate psychosocial and adherence support to children and families. The case manager provides ongoing holistic assessment of children and identifies those who need additional support such as food support, school enrollment, playgroups, and social welfare services.

A total of 140 children are now registered across eleven FCC sites, and 80 are on ART. Of the 80 children on ART, 30 have been enrolled in the program for just over three years, and to date there has been no loss to follow up of any of the children enrolled in care and support or on ART. While the number of children on PEPFAR ART at the district level OPC is small, the quality of pediatric care and treatment service provision at these district sites has been reported by external mentors as very high. Caregivers and health workers report excellent clinical and immunological outcomes, including high adherence and school enrollment rates, and improved nutrition. PMTCT is now provided in all FCC sites, allowing for the smooth transfer of PMTCT infants into CT services.

Providing pediatric CT services close to home in FCC sites with good community linkage facilitates good adherence and high rates of retention in care. Vietnam is now in a position to scale up district-level pediatric care into existing adult sites using the FCC approach.

Culture and language are important resources which people bring to development and to responding to HIV. UNESCO and UNAIDS recognise this in their call to consider people's cultural references and resources' in responses to HIV.

In a qualitative study conducted in Tanzania certain Swahili concepts emerged as important for social involvement in infant-feeding decisions. Such concepts are helpful in understanding people's responses and communicating information about HIV to Swahili-speakers in Africa. My interpreting experience suggests they are also helpful for cultural insight into understandings and responses to HIV by newer settlers to Australia from East and Central Africa.

Some of the ways that study participants talked are positive dimensions to more widely embraced negative concepts, particularly ideas of maximising immunity, or kinga (rather than reducing risk) and building openness, or uwazi (rather than fighting stigma).

Maximising kinga (immunity) was an important way that people evaluated methods of feeding infants. Breast milk and replacement milk have different kinds of kinga: maternal antibodies or being HIV-free. This positions kinga as an asset situated in mother's bodies or accessed as a resource in the community. Furthermore respondents noted how poverty affects maternal nutrition and hence decreases immunity and how wealth can purchase kinga in the form of medicines, including antiretrovirals, and replacement milk. Within sexual relations kinga is a term used for condoms, and people generally talk about having varying levels of kinga to explain variations in people's health or (lack of) infection.

Aibu (or shame) emerged as an important social force that restrains speech and actions as well as describing the awareness of being closely observed, with anticipation or experience of social disapproval. Amongst study respondents fear and shame took a more prominent place than stigma as driving forces restraining choices. Shame has more resonance than stigma, which in Swahili is only a recent concept related to harassment. It is noteworthy that respondents spoke more about accepting HIV, being open and focusing on solutions such as building an environment in which stigma does not thrive, than they did about reducing or 'fighting' stigma, or even fear.

**Paper Number: 261
IMPROVING PEDIATRIC
ADHERENCE AND RETENTION
IN HIV CARE AND TREATMENT
PROGRAMS: THE VIETNAM
EXPERIENCE**

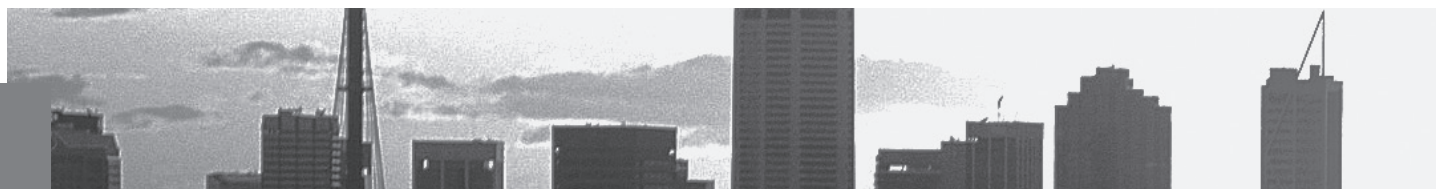
[Burdon R](#)

Family Health International Vietnam

**Paper Number: 681
SWAHILI CONCEPTS: KEYS TO
UNDERSTANDING RESPONSES
TO HIV**

[Burke JR](#)

University of New South Wales
Australia



Theme C: Issues in HIV prevention in Gay Men 2: 11.00am - 1.00pm

Paper Number: 548
WHAT WOULD GAY MEN BE PREPARED TO DO TO REDUCE RATES OF HIV?

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Many men in the recent PASH (Pleasure and Sexual Health) study indicated that they would be unwilling to make substantial long-term changes in their sexual behaviour to prevent syphilis, and that the main impediment to more frequent sexual health screening is lack of convenient access and the time required for current testing procedures.

We set out to determine which interventions might be acceptable to gay men in New South Wales in reducing HIV infections. In conjunction with this research, a mathematical model was developed that simulated a population of sexually active gay men to explore the potential epidemiological impact of each intervention.

We conducted an online survey and focus groups, to explore the feasibility of certain interventions aimed at reducing rates of HIV: partner reduction, increased condom use, increased testing frequency, increased testing coverage, increased disclosure of HIV status among sex partners, immediate anti-retroviral treatment of newly HIV diagnosed men and availability of pre-exposure prophylaxis to high risk men.

Preliminary data indicated that, similar to what had been found with respect to syphilis, changes in sexual behaviour (such as reducing sexual partner acquisition or increasing condom usage) were not uniformly acceptable, particularly to gay men at higher risk and not as a long-term strategy. In contrast, increasing rates of testing for HIV and increased disclosure of HIV status were broadly acceptable to most gay men. Availability of pre-exposure prophylaxis also had broad acceptance to gay men.

Paper Number: 469
WHICH PUBLIC HEALTH STRATEGIES WILL LIKELY HAVE THE GREATEST IMPACT IN REDUCING HIV INCIDENCE AMONG GAY MEN IN NSW?

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The HIV epidemic in NSW is predominately driven by transmission among gay men. Over the last decade the number of HIV diagnoses among gay men in NSW has fluctuated between 270-340 diagnoses but maintained a relatively constant level. This has occurred in conjunction with changes in sexual behaviour and the rise of risk reduction strategies and effective anti-retroviral treatment.

We set out to accurately model the transmission of HIV and sexual behaviour in gay men to evaluate the impact of plausible public health interventions aimed at reducing HIV infections. This was carried out in conjunction with social research using online surveys and focus groups to investigate the acceptability and feasibility of these interventions to gay men in NSW.

The model we developed is an individual-based model incorporating a detailed description of HIV transmission and the sexual behaviour of HIV-positive and HIV-negative gay men. It accurately reflects the trends in partner acquisition, unprotected anal intercourse (UAI), disclosure of serostatus to partners, serosorting for partners, testing rates, initiation of treatment, and virological failure seen in gay men in NSW from 1996 to 2010. Using this model we investigated the future impact of the following interventions: partner reduction, increased condom use, increased testing frequency, increased testing coverage, increased disclosure of HIV status among sex partners, immediate anti-retroviral treatment of newly HIV diagnosed men and availability of pre-exposure prophylaxis to high risk men.

Preliminary results indicate that short-term changes in sexual behaviour (such as reducing partner numbers and UAI) will have a minimal effect on the number of HIV infections in NSW. Increasing rates of testing for HIV, reducing the number of men who have never been tested for HIV, increasing the disclosure serostatus to partners, initiating treatment earlier, and using pre-exposure prophylaxis are likely to reduce the number of HIV infections in gay men.





Theme C: Issues in HIV prevention in Gay Men 2: 11.00am - 1.00pm

Peer education workshops have been one of the mainstays of community-based HIV prevention with gay men since the late 1980s in Australia. Starting with the popular “Start Making Sense” workshop for young gay men in 1989, ACON has developed and implemented peer education workshops with over ten thousand gay men, and now has a suite of nine workshops on offer, with more in development. Peer education is an efficient and cost effective method of HIV prevention. It enables a deeper, more meaningful and more complex engagement with HIV and sexual health information, embedded within a larger health and wellbeing framework, than can be achieved by other forms of HIV education such as social marketing. Additionally, one of the key strengths of peer education workshops is the inherently social nature of the education and the production of newly created (or strengthened) social networks with shared understandings of and commitment to safe sex.

How do we know if peer education works? There is scant research on the effectiveness of peer education workshops, and a great deal of peer education in Australia is not evaluated beyond the most basic process-oriented levels. Typically, very little data has been collected on the impact of gay men’s peer education workshops. To address this problem, ACON conducted community-based social research involving pre- and post-workshop evaluation exploring the knowledge, attitudes, skills and behaviours of the gay male workshop participants.

This presentation will: detail the evidence ACON has accumulated from delivering peer education workshops with gay men; analyse the evaluation data collected via ACON’s peer education workshops over the past three years in an effort to determine whether this HIV education methodology makes any discernable difference on HIV prevention among gay men; explore the limitations of the current workshop delivery and data collection processes; and outline the next steps to expand and strengthen the impact evaluation of ACON’s peer education workshops.

As HIV treatments became more successful, and as technologies such as viral load on which to base an assessment of sexual risk became available, gay men have adapted their sexual behaviours. The challenge is to develop prevention campaigns that adapt to HIV positive gay men’s sexual limits and include the way new understandings of risk and safety are incorporated in their sexual lives.

Drawing on a review of the social marketing campaigns – ‘SERO DISCO: Why let HIV get in the way of a good relationship?’ and ‘SEX PIGS: DARK AND DIRTY SEX AND MANAGING YOUR HEALTH’ – produced by Positive Life NSW (Australia), this paper will examine some of the current prevention issues affecting HIV positive gay men and educators. It will describe the relationships and potential conflicts between targeted risk reduction messages and condom reinforcement campaigns.

The effectiveness and credibility of HIV prevention depend on recognising there are different limits and boundaries for gay men and MSM in different sexual contexts. This has resulted in the necessity to develop targeted education, which may not emphasise the same messages and values contained within condom reinforcement campaigns. Articulating this within a ‘risk reduction framework’ may support more open discussions of appropriate risk reduction strategies and sustainable HIV prevention.

Positive Life NSW will continue to work with HIV positive men to develop prevention strategies, which respond to and support new understandings of changes to their sexual practices. Positive Life NSW and ACON NSW have developed a joint ‘Risk Reduction Strategy’, which will guide future work (e.g. our new campaign ‘WRAPPED OR RAW (POS-POS SEX) WANT THE FACTS’). Primarily, this strategy will support gay men using risk reduction strategies to confidently negotiate sex with partners by providing them with factual information that will assist them to identify and understand which risk reduction practices (e.g. non-condom based risk reduction strategies such as sero-sorting) are more or less effective and under what circumstances.

Positive Life NSW and ACON will ensure that ‘reinforcement of consistent condom use remains the foremost prevention priority; and concurrent targeted prevention messages and campaigns will be developed, implemented and evaluated’.

Paper Number: 789

GAY MEN’S COMMUNITY-BASED HIV PREVENTION PEER EDUCATION – WHAT IS THE EVIDENCE FOR OUR WORK?

[Bavinton BR¹](#)

ACON, Sydney, New South Wales
Australia

Paper Number: 196

HIV PREVENTION IN 2010: COMPARISON OF TWO CAMPAIGNS

[Triffitt K A](#)

Positive Life NSW, Sydney, Australia

Theme C: Issues in HIV prevention in Gay Men 2: 11.00am – 1.00pm

Paper Number: 286
AUSTRALIAN GAY MEN NEVER TESTED FOR HIV

Zablotska I¹, Holt M², Mao L², Prestage G¹

¹National Centre in HIV Epidemiology and Clinical Research, University of New South Wales; Sydney, Australia;
²National Centre in HIV Social Research, University of New South Wales, Sydney, Australia.

In Australia, the level of ever being tested for HIV among gay community attached men (~90%) is similar to similar settings in the US and is higher than in most European countries. However, some Australian gay men do not follow testing recommendations. We reviewed predictors of not being tested and related issues.

We used data from all available Australian Gay Community Periodic Surveys conducted during 1996-2010 and assessed the prevalence of ever being tested for HIV by state and year. Among non-HIV-positive men who had been previously tested for HIV, we analyzed the proportion of men tested according to the testing guidelines (in the last 12 months). We also assessed a range of predictors of not being tested for HIV: sociodemographic factors (age cohort, ethnic background, state and region of residential location, etc.) and behaviours associated with testing (sexual and drug use practices). We also reviewed the issues related to not being tested which were explored in a special Sydney GCPs dedicated to testing (August 2008).

Behavioural surveillance indicates that HIV testing coverage in Australia has improved over time and so did the frequency of testing. Across jurisdictions, the proportion of never tested men remained lowest in NSW (6.1%) and highest in Western Australia (16.8%). This proportion declined with age and was associated with sexual practices (i.e., men who engaged in unprotected anal intercourse and group sex and reported a higher number of partners were more likely to be tested). Young men engaging in risky sexual practices were not undergoing testing at the same rate as older men. Gay men of aboriginal and non-European backgrounds and those who live in rural/regional areas are more likely to not be tested for HIV. For men who are not HIV positive, the main issue is a convenient access to testing in the services that are gay friendly and experienced with HIV.

Our analysis of behavioural surveillance highlights the remaining issues in HIV testing in Australia and indicates the areas for its improvement.

Paper Number: 348
TRENDS IN TESTING AND POSITIVITY FOR SEXUALLY TRANSMITTED INFECTIONS AMONG MEN WHO HAVE SEX WITH MEN

El-Hayek C¹, Gold J¹, Goller J¹, Gouillou M¹, Bergeri I¹, Hellard M¹, Stoové M¹

¹Centre for Population Health, Burnet Institute, Melbourne, Australia

Men who have sex with men (MSM) are known to be at high risk of HIV and other sexually transmitted infections (STI) nationally. To enhance existing surveillance mechanisms, the Victorian Primary Care Network for Sentinel Surveillance of blood borne viruses (BBV) and STIs was established to collect testing, demographic and risk behaviour information among MSM presenting for BBV and STI testing at high caseload sexual health and general practice clinics in Victoria.

We analysed testing and behavioural data captured by the system between January 2007 and June 2009 from five clinics to describe trends in STI testing among MSM in Melbourne.

Among HIV negative MSM, HIV, syphilis and chlamydia testing over the two and a half year period increased by around 15 tests per quarter on average ($p < 0.001$). Among HIV positive MSM, syphilis and chlamydia testing increased by an average of eight and four tests per quarter respectively ($p = 0.001$). The average number of tests per individual remained stable over time.

Among HIV negative MSM the proportion positive for HIV (1.8%) and syphilis (2.2%) did not change over time. Over time, the chlamydia proportion positive increased among all HIV negative MSM from 5.5% in 2007 to 7.6% in the first half of 2009 ($p < 0.05$) and among MSM aged 16-29 years from 5.0% in 2007 to 8.3% in 2009.

Among HIV positive MSM the proportion positive for syphilis and chlamydia infections in all age groups for the 2007 to 2009 period was 2.5% and 10.7% respectively and was highest in the 16-29 years age group; 3.7% and 19.5% respectively.

These findings suggest that increasing numbers of MSM are presenting for testing at these clinics, possibly as a result of recent campaigns promoting increased STI testing. Younger MSM represent an important target population for future health promotion campaigns aimed at reducing STI transmission.

Theme C: Issues in HIV prevention in Gay Men 2: 11.00am - 1.00pm

Knowing one's HIV status has been shown to reduce the risk of transmitting HIV. Men who have never been tested or test infrequently are less likely to know their status. We set out to determine what barriers to testing existed among gay men in Australia, especially among those who had never been tested or were testing infrequently.

The PASH (Pleasure and Sexual Health) Study was an online survey of 2306 Australian gay men recruited during mid-2009, with supplementary qualitative components including in-depth interviews and focus groups. As part of this study, we explored the current barriers to testing, and possible interventions to reduce these barriers (including rapid HIV testing).

Most men (84.8%) had been tested for HIV. Of those, more than half (58.4%) indicated that they would test more frequently if available tests were more convenient, and more than two-thirds (68.9%) indicated they didn't have enough time to go for tests. Two-thirds (65.2%) of those that had never been tested for HIV indicated that the likelihood of getting tested would be increased if they had access to rapid testing. Three quarters (75.2%) of men who had been tested for HIV indicated that they would increase their testing frequency if they had access to rapid testing.

Men who have never been tested or test infrequently mostly identified barriers to testing as not having enough time to test or not getting results quickly. The implementation of rapid HIV testing should be a priority, as it would help reduce these barriers and increase testing among these at-risk men, thereby contributing to a reduction in rates of HIV transmission.

In Australia, behavioural surveillance among gay men is an important tool for monitoring sexual, testing and drug use practices related to HIV transmission. We reviewed contemporary trends in available indicators and their ability to forecast changes in HIV epidemic.

We used data from all available Australian Gay Community Periodic Surveys conducted during 1996-2010 and assessed the prevalence of sexual practices such as: unprotected anal intercourse with casual (UAIC) and regular partners (UAIR), proportion of relationships that are not seroconcordant and UAIR within these relationships, proportion of men with a very high number of partners (50 or more in a six-month period) and drug use for the purposes of sex. We also assessed trends in HIV testing among non-HIV positive men. We assessed trends using chi-square test for trend and estimated associations using logistic regression analysis.

HIV surveillance has identified differing trends in HIV notifications across Australian states: stable rates of HIV diagnoses in NSW since 2003 and increasing rates in Victoria and Queensland. Behavioural surveillance indicates similar trends in sexual practices, specifically in the proportion of gay men engaging in UAIC. However, the patterns in NSW were reversed due to increases in UAIC in the last two years. Since 2001 there was a strong relationship between the change in this indicator and the change in HIV diagnoses two years later ($p < 0.001$). Trends in UAIR among gay men in regular relationships have been increasing in all three jurisdictions, including in relationships that were not seroconcordant. Decline in the proportion of men with a very high number of partners has been sustained in all three states. Proportion of men never tested for HIV remained lowest in NSW and the frequency of testing for HIV and STI has slowly increased during 2001-2009.

Behavioural surveillance highlights the importance of behavioural surveillance and UAIC as the best predictor of HIV diagnoses in Australia. The recent increase in this indicator, as well as increase in other indicators of risk (e.g., UAIR in serodiscordant relationships) in NSW, Victoria and Queensland raises alert for HIV education and prevention services.

Paper Number: 598
RAPID HIV TESTING: WHAT WE WANT, AND WHEN WE WANT IT

Bradley J.¹, Prestage G.^{1,2}

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Paper Number: 288
CONTEMPORARY TRENDS IN HIV RELATED BEHAVIOURS AMONG GAY MEN IN THREE AUSTRALIAN STATES; NSW, VICTORIA AND QUEENSLAND

Zablotska L.¹, Holt M.², Mao L.², Prestage G.¹

¹National Centre in HIV Epidemiology and Clinical Research, University of New South Wales; Sydney, Australia; ²National Centre in HIV Social Research, University of New South Wales, Sydney, Australia.

Theme A: Translational research: 11.00am - 1.00pm

Paper Number: 614
HIV-1 ADAPTATION TO EARLY
HLA-RESTRICTED IMMUNE
RESPONSES IN ACUTE
HETEROSEXUAL TRANSMISSION.

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Roberts SG¹, Chopra A¹, Demaine E¹,
Krishnan T¹, Mallal S^{1,2}, John M^{1,2}

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The immune responses which drive the earliest selection of viral adaptations in heterosexual transmission provide insights into the responses most important for acute natural control of founder viruses, which should be harnessed by preventative vaccines. Similarly, those viral adaptations which revert early after transmission will reflect sites of strong constraint against escape from natural and vaccine-induced responses. Here we characterize in detail the virological and immunological events in an individual who presented with HIV (subtype A) infection only days after epidemiologically proven sexual transmission, and pre-seroconversion (Fiebig stage II). Quantitative changes to intra-patient viral sequences were evaluated with deep pyrosequencing of full-length HIV-1 genomes in both donor and recipient.

Longitudinal Sanger and FLX 454 sequencing of HIV-1 was performed on 8 plasma samples from day 13 to 467 post-transmission. HIV-specific CD8 T cell responses were evaluated in 9 PBMC samples (day 35-656) using HLA-class 1 matched peptides in the IFN γ ELISpot assay.

The donor and recipient shared an HLA-C allele (HLA-C*04) but were discordant at all other HLA class I loci. Evolution of escape in an immunodominant HLA-B*1503-restricted NefWL9 epitope was detected on day 264 and was present in 41% of viral quasi-species at day 264. T cell responses were detected prior to sequence change and decreased thereafter. Sequence change and CD8 T cell responses were also detected in relation to other published HLA-restricted epitopes. However, early reversion and subsequent re-selection was observed at position 133 of Nef which is not within a known epitope but corresponded to a HLA-C*0401 associated polymorphism in population-based studies. Overall, IFN γ responses were detected to 3 of 28 HIV-1 peptides tested on day 35 but broadened to 20 responses while infection became established and reached peak viral load on day 383. T cell responses declined after commencement of antiviral therapy.

Adaptive viral changes and reversions in early HIV-1 infection occur at novel sites not captured in immunological studies of chronically infected individuals. This data suggests the presence of novel immune hierarchies and escape mutations in early infection, which may be applied to HIV vaccine design against founder viruses.

Paper Number: 63
PLASMA LEVELS OF IL-18, sCD14
AND CCL2, CXCL8 AND CXCL10
IN TUBERCULAR IMMUNE
RESTORATION DISEASE IN A
NORTH INDIA POPULATION

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The pathogenesis of Immune

Restoration Diseases (IRD) in HIV patients infected with tuberculosis (TB) is poorly understood. We showed that M.tuberculosis can be isolated more readily from IRD than non-IRD patients before ART, and can be isolated from many patients during the IRD.

We hypothesised that levels of chemokines and inflammatory mediators before and on ART may influence IRD. IL-18 is produced by monocytes and drives a Th1 response. CD14 is the major LPS-binding protein of monocytes. It exists as a soluble molecule in plasma and levels are elevated in disease. We included 3 chemokines. CXCL8 (IL-8) is chemotactic for T-cells and neutrophils. MCP-1 (CCL2) aids recruitment of monocytes to a site of infection, whilst CXCL10 mediates recruitment of effector T-cells.

Plasma samples were collected from 62 Indian patients starting ART with <200 CD4 T-cells/ul in New Delhi. All patients received anti-tubercular therapy prior to ART. 19 patients (31%) experienced TB IRD. Plasma IL-18, sCD14, CXCL8, CCL2 and CXCL10 were measured by ELISA or CBA. The time nearest to the median time of IRD [27 days] was selected for each non-IRD patient.

Plasma IL-18 and sCD14 levels were similar in all patients at baseline and week 4. IL-18 and sCD14 levels were higher during an IRD compared to baseline (p=0.05), but did not rise significantly in non-IRD patients. CCL2 and CXCL8 were lower in IRD patients than non-IRD patients at baseline (p=0.03 and p=0.01 respectively). CXCL8 was higher in non-IRD patients at week 4 compared to baseline (p=<0.02). CXCL10 levels were higher in non-IRD at baseline and week 4.

The increased levels of IL-18 and sCD14 in HIV-TB IRD during IRD suggest a role for the monocyte response to bacterial motifs in the pathogenesis of IRD. Low levels of chemokines at baseline may promote IRD, possibly by impairing the clearance of M.tuberculosis before ART.

Theme A: Translational research: 11.00am - 1.00pm

At present HIV testing in Pacific Island Countries (PICs) is performed using a rapid test (Determine HIV1/2, Inverness) then referring reactive samples overseas for confirmatory testing. This referral process has been difficult, frequently resulting in long turn-around times or degradation of samples in transit rendering them un-testable. With low HIV prevalence populations, the majority of reactivity obtained using a high sensitivity screening test is false. The lack of timely confirmatory testing presents a major barrier to delivery of appropriate care.

At a meeting of regional development partners in 2008 the decision was taken to validate an HIV confirmatory testing algorithm based on using rapid tests that could be implemented by PICs. A taskforce comprising members from principal regional partners (e.g. WHO, SPC, CDC, UNICEF, UNAIDS, NRL, PPTC) was formed to oversee a classic three phased HIV testing algorithm validation.

In phase 1, more than 700 samples were screened with Determine in PICs. All but a small number of these were tested on each of five rapid tests (Capillus HIV 1/2 and Uni-Gold HIV from Trinity Biotech, Stat Pak-HIV1/2 from Chembio, Insti HIV1/HIV2 from Biolytical and Genie II from BioRad) at the National Serology Reference Laboratory, Australia (NRL). The true status of each of the 700 samples was determined using EIA and western blot as the reference method. The samples comprised 135 HIV positive, 467 HIV negative and 105 samples that showed false positive reactivity on Determine. Assays that demonstrated common false reactivity with Determine were eliminated. Two of the five tests were identified which, used in parallel, yielded the same result as the reference method.

The algorithm relies on continuing to screen with Determine and reactive samples being further tested, in parallel, with both Uni-Gold and Insti. This algorithm yields a sensitivity of 99.24%, a specificity of 100%, a positive predictive value of 100% and a negative predictive value of 99.82%.

In phase 2, this rapid-test based algorithm will be implemented in PICs with continuing quality assurance provided by NRL. This will eliminate the need for shipping samples internationally, reduce turn-around times and improve quality of client care and management.

Diagnosis of primary HIV infection (PHI) is important for individual and public health reasons. However laboratory confirmation of infection may be prolonged because several weeks can elapse before the first appearance of virological markers. Although molecular assays are not licensed for diagnostic purposes, when used as supplemental tests in conjunction with an evolving western blot (WB), they can reduce the time to diagnosis and notification of HIV infection. PHI is often characterised by a high viral load (VL) ($>10^5$ RNA copies/ml of plasma) but previous studies have reported the occurrence of false VL positive results in cases of PHI. These occurred in less than 10% of cases and involved VLs $<3,000$ copies/mL. Usually these results were not reproducible in follow-up samples, suggesting they were not assay specific.

We measured the VL on 473 patients with an evolving WB profile during 2001 to 2009 inclusive. VLs ranged from not detected (<50 copies/mL) to $>10,000,000$ copies/mL using either Roche Monitor HIV-1 assay or the Abbott HIV-1 Real Time assay. Overall, 53 (10.2%) of all PHIs had VLs $<3,000$ copies/mL, 27 of which had VLs of $<1,000$ copies/mL.

Follow-up samples were available for 52 of these cases. HIV RNA was detected in all subsequent samples and the WB evolved to a full profile. Sequencing of the protease and reverse transcriptase regions indicated that the low-level amplification was specific. Over time, most individuals showed a gradual increase in VL.

HIV RNA testing is a useful supplemental assay for diagnostic purposes. Its use decreases the time taken to provide a definitive diagnosis of HIV infection. A low-level VL result in the presence of an evolving western blot result (group 3 or 4 indeterminate) should be considered an indication of acute HIV infection.

Paper Number: 531
VALIDATION OF A RAPID TESTING ALGORITHM FOR CONFIRMING HIV INFECTION IN THE PACIFIC REGION

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Paper Number: 492
LOW HIV VIRAL LOAD RESULTS AT THE TIME OF PRIMARY HIV INFECTION ARE LIKELY TO BE SPECIFIC.

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Theme A: Translational research: 11.00am - 1.00pm

Paper Number: 798
DRIED BLOOD SPOTS REPRESENT A CONVENIENT ALTERNATIVE SPECIMEN TO PLASMA FOR HIV DRUG RESISTANCE GENOTYPING AND SUBTYPING IN RESOURCE-LIMITED SETTINGS

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Global initiatives to increase accessibility to antiretroviral treatment in developing countries have necessitated the development of a simple and cost-effective method for collection and transportation of specimens for HIV drug resistance testing. We therefore evaluated the reliability and practicality of using dried blood spots (DBS) as an alternative specimen to plasma using standard clinical assay methods.

Fifty microliters of ACD/EDTA-anticoagulated whole blood from HIV-positive diagnostic or monitoring specimens were applied onto the Whatman 903 filter paper. DBS were air-dried at ambient temperatures overnight in a biosafety cabinet and stored in low gas-permeable bags with desiccant at -20°C. Matched plasma aliquots were stored at -80°C. For each pair of specimens, plasma was extracted using the Qiagen QIAamp viral RNA mini kit, and DBS were extracted using the bioMérieux Nuclisens easyMAG system. Sequencing was done using the Trugene HIV-1 Genotyping assay. Sequence consisting of protease codons 4-99 and reverse transcriptase codons 38-248 was aligned with reference sequence, HIV-1 B_{LAV-1}, and edited. The genetic fingerprint tool of the Trugene software was used to determine the nucleotide sequence concordance between the DBS and plasma.

We tested 16 paired samples with plasma viral loads and CD4⁺ T cell counts ranging from 520–422,000 copies/mL and 32–725 cells/μL, respectively. Sequences were determined by phylogenetic analysis to be from subtype B and CRF01_AE strains. A complete genotype was obtained for 14 of 16 (87.5%) DBS specimens and all of their plasma counterparts. All 33 resistance-associated mutations found in plasma viruses were detected in the corresponding DBS. Four discrepancies occurred at minor mutation amino acid positions due to mixtures of the wild type and mutant residue.

We demonstrated the feasibility of utilising DBS for HIV drug resistance genotyping and subtyping using a commercial kit after storage at -20°C for over one year. The HIV-1 pol sequences generated from paired plasma and DBS are highly concordant and yield comparable results for drug resistance mutation interpretation. Because of its ease in collection, storage and transport, the use of DBS represents a practical alternative to plasma as a reliable specimen for HIV drug resistance testing in resource-poor settings.

Paper Number: 324
PREVALENCE OF ONWARD TRANSMISSION AND ASSOCIATED TRANSMITTED DRUG RESISTANCE IN PATIENTS WITH PRIMARY HIV INFECTION IN VICTORIA, AUSTRALIA

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Despite awareness and behavioural modification programs and the use of antiretroviral drug therapy, the incidence of new HIV diagnoses in Australia, and Victoria in particular, has plateaued since 2004, including among men who have sex with men (MSM). In such an environment a decrease might have been expected. Transmission of HIV by individuals who are unaware of their infection (onward transmission) is likely to contribute to these new cases. We investigated the prevalence of onward transmission in Victorian patients infected with subtype B viruses between 2005 and 2009. The frequency of transmitted drug resistance (TDR) in those cases was also assessed.

Phylogenetic analysis was undertaken on pol sequences derived from 695 cases of primary (n = 285) or newly diagnosed (n = 410) subtype B associated infections (98% of whom were MSM). Initial phylogenetic analysis linked 436 of the 695 cases (63%). Several phylogenetic clusters contained more than 20 related sequences involving both primary and newly diagnosed cases, suggesting that some of the latter cases were recently infected. When seeking evidence for the prevalence of onward transmission of HIV, only individuals with a confirmed primary HIV infection and whose date of infection was within 6 months of another phylogenetically linked case were considered to be potentially involved in an onward transmission event. In this population, 85 cases (29.8%) had infections that could have arisen through transmission from another recently infected person. 8 of these (9.4%) were infected with a virus harbouring a drug resistance mutation.

This study provides a scientific rationale for enhanced testing of at-risk individuals to identify acute infections. That some of the cases we identified are also associated with TDR enhances the need for a response.



Theme A: Translational research: 11.00am - 1.00pm

Human Immunodeficiency Virus (HIV) infection is a worldwide epidemic. Among different types of opportunistic infections in people living with HIV/AIDS (PLHA), disease caused by mycobacterium tuberculosis is very common, causing significant morbidity and mortality. The diagnosis of extrapulmonary tuberculosis (EPTB) is difficult because of varied presentations and non-availability of the adequate diagnostic tools.

This study was aimed to explore the burden of EPTB and its correlation with CD4⁺ count in patients with HIV/AIDS attending HIV clinic in B.P.Koirala Institute of Health Sciences.

Analysis of the PLHA's case records having documented CD4⁺ counts visiting HIV clinic was carried out. All the patients' record was screened to obtain the files having adequate patient information including CD4⁺ counts. The data was entered in the excel sheet and analyzed in SPSS version 10.0 using appropriate tests.

Out of 164 patients, 36 patients (21.95%) were found to have extra-pulmonary tuberculosis. Common sites for EPTB were cervical lymph nodes (41%), disseminated tuberculosis (30%), pleural effusion (16%), abdominal tuberculosis (7.69%) and bone tuberculosis (2.7%). Patients with CD4⁺ count < 200/cmm had significantly high incidence of EPTB (p=0.018).

Present study reveals the high burden of EPTB in patients with HIV/AIDS attending HIV clinic of BPKIHS. High index of suspicion in PLHA with CD4⁺ count <200/cmm, and availability of recent diagnostic tools may help in early diagnosis and initiation of therapy; hence reducing morbidity and mortality related with EPTB in PLHA.

**EXTRAPULMONARY
TUBERCULOSIS IN HIV/AIDS: FIRE
UNDER THE ASH**

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Sciences, Dharan, Nepal

Satellite Session: Understanding and responding to alcohol and other drug use in gay men with depression in general practice: a consultation workshop: 11.00am - 1.00pm - Sponsored by Beyond Blue

Paper Number: 923
UNDERSTANDING AND
RESPONDING TO ALCOHOL AND
OTHER DRUG USE IN GAY MEN
WITH DEPRESSION IN GENERAL
PRACTICE: A CONSULTATION
WORKSHOP

Saltman D¹, Holt M², Bryant J²,
Newman C²

¹Southern Cross University:

²National Centre in HIV Social
Research, The University of New
South Wales

The National Centre in HIV Social Research recently completed a three-year study called the Primary Health Care Project on HIV and Depression. This research explored how depression is influenced by the social, psychological and health-related features of gay men's lives and also provided preliminary insights into how different patterns of alcohol and other drug use are related to depression. With funding from beyondblue – the national depression initiative, we have conducted further research with the aim of exploring more closely the issues associated with alcohol and drug use in data collected on depression in gay men (both HIV positive and negative) and their general practitioners in high-HIV-caseload general practices. This session will present the key findings from three new papers, with the aim of consulting on how our analysis translates into practice implications for those who work with gay men. The aim of this group of papers is to illuminate and support the clinical dynamics between gay men and their doctors, particularly in relation to alcohol and other drug use and depression.



Theme C Symposium: Health Promotion - Turning Theory Into Practice: 2.00pm - 3.30pm

Globally HIV disproportionately affects people in low and middle-income countries who account for over 95% of people acquiring HIV annually. Permanent and temporary migration from low and middle-income countries is an integral part of Australia's immigration program, society and economy. Consequently, HIV health promotion will need to continue to adapt to the emerging epidemic of HIV among people from CALD backgrounds in Australia - a priority population in the National HIV Strategy 2010-2013.

Cultural competency provides a framework for re-orienting health promotion programs to better meet the needs of culturally marginalised populations. It has been gaining increased recognition internationally and in Australia. Cultural competency incorporates systemic, organisational, professional and individual approaches to achieve more inclusive and more equitable practice in service delivery and program implementation. Cultural competency is more than an awareness of cultural differences but rather a process to develop the skills of staff, their agencies and the sector they work to effectively engage with culturally diverse populations.

The paper will examine the intersections of cultural competency and health promotion principles and propose specific examples of culturally competent health promotion practice. This practice can support the building of relationships, trust and partnerships with the most-at-risk CALD populations to ensure that HIV health promotion practice is more effective and less likely to stigmatise people with, or at risk of, HIV among CALD communities in Australia.

Paper Number: 844
THROUGH THE LENS OF
CULTURAL COMPETENCY:
HEALTH PROMOTION
PRACTICE AMONG PEOPLE
FROM CULTURALLY AND
LINGUISTICALLY DIVERSE
BACKGROUNDS

McMahon T¹, Luisi B¹

Theme B: HIV in Diverse Populations: 2.00pm - 3.30pm

Paper Number: 446
BEYOND THE GRIM REAPER
– PREPARING AGED CARE
SERVICES FOR PEOPLE LIVING
WITH HIV

Craig LH¹, Crock LA², Barrett CM³

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²Australian and New Zealand Association of Nurses in AIDS Care, Melbourne, VIC, Australia;

³Gay and Lesbian Health Victoria, Melbourne, VIC, Australia

This paper examines the evidence regarding the provision of aged care services to people living with HIV in Victoria. It begins by presenting data on the health inequities of this cohort and their reluctance to make use of services. This gap is explored with reference to data from interviews with aged care service providers, older gay men and HIV positive people accessing aged care services. The interviews indicate that most aged care service providers have not received education about HIV since the Grim Reaper Campaign of the 1980s. Consequently, care provided to HIV positive clients (or gay clients who are often assumed to be HIV positive) can be driven by fear of contagion and assumptions about gay men. This approach fails to build a climate that encourages service use.

To address the education needs of aged care service providers, a critical approach is proposed. The approach is based on the understanding that sustained improvements to service provision are achieved when existing myths, stereotypes and fears are identified and challenged. To accomplish this narratives from older people living with HIV are shared with service providers. These narratives share common threads of lived human experience that enables service providers to understand service provision through the client's eyes. This provides permission for discussion around fears and assumptions and the opportunity for discussion about evidence-based and person-centered aged care services for people living with HIV.

Paper Number: 549
SOCIAL ISOLATION FOR PEOPLE
LIVING WITH HIV/AIDS IN
SOUTH EAST QUEENSLAND:
DETERMINANTS AND
CONSEQUENCES

¹Fitzgerald L, ¹Scherman J,

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²Reynolds S, ⁴Lambert S, ²Howard C,

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Social isolation is acknowledged as an issue for many people living with HIV/AIDS (PLWHA). It is associated with lower physical and social functioning, stress and poor quality of life. Social isolation has complex links with HIV related stigma, discrimination and broader determinants of health such as employment, housing and social disadvantage.

Positive Directions (PD) an organisation within Spiritus provides care coordination, information and a referral service for individuals with HIV in Queensland, Australia. It has a client base of approximately 600 people. PD Community Liaison Officers (CLOs) recognized that a number of their clients have significant issues associated with social isolation. PD staff and social researchers from the School of Population Health and School of Medicine, University of Queensland developed and undertook a qualitative project to better understand social isolation in PLWHA in SE Queensland.

In this qualitative study 20 PLWHA from the Gold Coast, Brisbane South, Brisbane North and the Sunshine Coast identified as experiencing social isolation were interviewed. An iterative and participatory analysis plan was developed and thematic analysis was undertaken where themes were clustered together to form overriding, or larger themes. Individuals' talk was also scrutinised for any use of conflicting or contradicting discourse, to tease out complexities, ambiguities and contradictions.

Participants described complex and diverse experiences of social isolation. Social isolation was related to socio-economic factors including limited income, poor transportation, housing and no internet access. All described few social networks. Some discussed their restricted social networks due the death of friends/partners and their caring roles. Poor mental health and marginalization was commonly expressed. Aging with HIV was a dominant theme in the interviews, related to the construction of identity(ies) and the establishment of social networks and social support. Some participants described how they actively resisted social isolation in their day to day lives. Facilitators and barriers to accessing services were also described.

The outcomes of this study will inform service development which addresses social isolation amongst the PD client group, paying specific attention to ethnicity, sexual orientation, age and gender. This research acknowledges the fundamental human right for all people to be participate fully in social engagement and is an essential prerequisite to effective care and support for PLWHA.



Theme B: HIV in Diverse Populations: 2.00pm - 3.30pm

A crucial aspect of modern HIV management in Australia is the active involvement of individuals living with HIV, who need to make informed decisions about lifestyle and therapy. African-born people living with HIV in Australia include a large proportion of women, people who acquired HIV through heterosexual sex, and people speaking languages other than English. Relatively little information is available for African Australians living with HIV, on which to base their decisions about self-management. This study aimed to discover the types of information sought by African Australians living with HIV and the barriers impeding their access to such information.

A case series of African-born adults living with HIV in Victoria was conducted. Data was collected in semi-structured interviews. Interview transcripts were analysed thematically to identify types and sources of information sought by participants, barriers that impeded access to such information, and suggested means for providing them with information in future.

Fourteen men and six women were interviewed. Participants reported seeking sought information about new treatments for HIV (particularly vaccines and curative treatments), side effects of antiretroviral drugs, and the possibility of having children without mother-to-child transmission of HIV. Doctors and other health professionals were favoured sources of current and future information, but other sources included the Internet and positive peer support organizations. All nominated English as their preferred language in which to receive information. The main barrier impeding access to information was stigma within African communities against people living with HIV.

African Australians living with HIV are in need of accurate information from authoritative sources on which to base decisions about managing their HIV infection, but this information must be provided by discrete means that do not expose them to stigma through unintentional disclosure of their HIV status.

Ageing while living with HIV has emerged as a major issue for service providers, clinicians, policy makers and HIV positive people themselves. Analyses of aging with HIV have demonstrated negative health and well being consequences. However, these analyses have often relied on comparisons of younger and older PLWHA, often without sufficient sample size to allow for meaningful comparisons. It is important to gain a more nuanced understanding through deeper analyses and differentiation in older age groups of PLWHA.

This paper presents analyses of data from the HIV futures six survey, an anonymous cross-sectional survey of PLWH in Australia. We focus on the 768 participants over the age of 40 years, split into decades: 40-49 years (N=377); 50-59 years (N=263); and 60-69 years (N=128). Comparisons are made between these groups in the areas of demographics, general health and well-being, HIV specific aspects, co-morbidities and other health issues, sex and relationships, and sources of support.

Older HIV positive people are more likely to live in regional and rural Australia. There are major age related differences in specific medical conditions. There is a decline with increasing age in the reporting of sleep disorders and the experience of nausea and diarrhoea. There is an increase with increasing age in the reporting of lipoatrophy/ lipodystrophy, peripheral neuropathy, raised cholesterol and insulin resistance. Older participants were also more likely to report diagnosis with both hepatitis B and C. Older age is associated with lower use of psychiatric medications (antidepressants and anti-anxiety medication), but higher uptake of antiretrovirals. Older age is associated with having less sex, including casual sex. Older age groups use more services, of almost all types, and report higher levels of social support from a number of different sources.

Survivor, lifestyle and cohort effects are likely to be important considerations in understanding ageing with HIV in Australia. Age cohort differences do not universally reflect increasingly negative health and wellbeing.

Paper Number: 573

**WHAT WE WANT TO KNOW:
INFORMATION SOUGHT BY
AFRICAN AUSTRALIANS LIVING
WITH HIV**

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Paper Number: 476

**AGEING WITH HIV: HEALTH AND
WELLBEING COHORT EFFECTS
FOR THOSE OVER 40**

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Theme B: HIV in Diverse Populations: 2.00pm - 3.30pm

Paper Number: 231
AN INNOVATIVE MODEL OF CARE FOR HIV POSITIVE PREGNANT WOMEN IN VICTORIA.

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The state of Victoria has seen an increase in the number of pregnant women with HIV infection. Many of these women know their HIV diagnosis prior to pregnancy, some are diagnosed for the first time as part of antenatal screening and some have achieved conception via assisted reproduction. In order to achieve optimal outcomes for both mothers and babies, including maximal risk reduction of transmission of HIV, these women require a co-ordinated multidisciplinary approach during and after pregnancy; in addition, rigorous follow-up of exposed infants is required.

In response to the increasing clinical need, the Victorian HIV Consultancy (VHVC) has in collaboration with the two major obstetric centres and the leading paediatric centre in Victoria developed and piloted an integrated multidisciplinary model of care.

This paper will examine the role of the VHVC in the development phase (initial 3 months) and implementation phase (9 months) of this pilot and summarise the preliminary evaluation of this model of care.

Paper Number: 710
CHARACTERISTICS AND OUTCOMES OF HIV DISCORDANT COUPLES ATTENDING AUSTRALIA'S FIRST MULTIDISCIPLINARY ASSISTED REPRODUCTION PROGRAM 2003-2010

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In 2003 the first multidisciplinary program providing assisted reproductive treatment to HIV discordant couples in Australia was established at the Royal Women's Hospital in collaboration with the Burnet Institute, the Alfred Hospital and Melbourne IVF. This program provides reproductive advice, semen preparation, semen HIV testing and assisted reproduction including intrauterine insemination (IUI), in vitro fertilisation (IVF) and/or intracytoplasmic sperm injection (ICSI) to couples as a means of reducing the risk of HIV transmission to the uninfected partner.

As of March 2010, 39 HIV-infected clients have proceeded beyond the initial consultation on the program; 29 HIV-infected males with an uninfected female partner and 10 HIV-infected women (8 with an uninfected male partner and 2 utilising donor sperm). Of the 37 clients with complete data available the median year of HIV diagnosis was 1999 (range 1984-2006), 4/37 had a history of an AIDS defining illness, 32/37 had a plasma HIV viral load <400 copies/mL at first consultation and four clients were antiretroviral (ARV) naïve. Five of the 33 were commenced on ARVs for the purpose of the program and not for standard immunological parameters. Nine clients were co-infected with hepatitis C and four with hepatitis B virus.

222 semen samples have been tested for HIV RNA. 18/222 (8%) have had HIV RNA detected despite being on cART with an undetectable HIV viral load in plasma.

There have been 162 completed cycles; 86 IUI and 76 IVF of which 30 were ICSI and 28 frozen embryo transfers with 26 pregnancies. This equates to a clinical pregnancy rate (per cycle) of 16.3% for HIV-infected males with an uninfected partner and 15.4% for HIV-infected women. Of the 26 pregnancies, three are ongoing and there have been seven miscarriages and 19 babies. No HIV transmission to the baby or uninfected partner has occurred.





Theme B: HIV in Diverse Populations: 2.00pm - 3.30pm

Introduction: Assisted reproductive techniques along with advancements in combination therapy have enabled couples discordant for HIV infection to consider having children. The Chronic Viral Illness (CVI) program at the Royal Women's Hospital in Melbourne was established in 2003 as a means of reducing the risk of transmission to the uninfected partner. Research exploring reproductive decision making and experiences of couples accessing such programs remains in its infancy.

Aim: To explore the medical and psychosocial experiences of couples on the CVI program.

Method: A semi-structured interview investigated participants' HIV history, family decision making, engagement with and experience of the CVI program. Twenty couples in treatment from June 2008-June 2009 were invited to participate, with 6 couples expressing an interest in the study. A total of 10 people participated, comprising of 4 couples and 2 individuals.

Results: Interviews were transcribed verbatim and thematic content analysis was used to analyse the qualitative data. Themes associated with vertical and horizontal transmission were highlighted, in conjunction with the impact of ART failure. The desire for parenthood in the context of HIV infection was examined, including external pressures and expectations on participants to have children. Disclosure of HIV status to children, family and health care professionals was also examined.

Discussion: Respondents experiences of the CVI program have been positive though varied. Participants expressed high expectations of the program particularly regarding the success of a pregnancy. HIV was not seen to be a clinical indicator for infertility by patients leading to confusion and dissatisfaction with ART outcomes. This study presents new insights into the experiences of clients undertaking ART procedures.

Paper Number: 248
FERTILITY, CONCEPTION
AND HIV – A QUALITATIVE
STUDY OF HIV DISCORDANT
COUPLES ACCESSING ASSISTED
REPRODUCTION TREATMENT
(ART).

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Theme B: Treatment and Monitoring – Clinical Studies: 2.00pm - 3.30pm

Paper Number: 482
ANTIRETROVIRAL THERAPY
INTENSIFICATION WITH
RALTEGRAVIR OR ANTI-
LIPOPOLYSACCHARIDE
IMMUNOGLOBULIN
FROM HYPER-IMMUNE
BOVINE COLOSTRUM IN
ANTIRETROVIRAL-TREATED
PATIENTS EXHIBITING A
SUBOPTIMAL CD4+ T-CELL
RESPONSE: THE CORAL STUDY

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Sub-optimal CD4+ T-cell recovery despite virologically suppressive combination antiretroviral therapy (cART) is observed in up to 30% of HIV-1 infected individuals. Lower CD4+ T-cell counts on cART are associated with a greater risk of morbidity and mortality. The pathogenesis of poor immunological response is unclear and chronic immune activation during cART is thought to play an important role. Low level viraemia and bacterial translocation are hypothesised to contribute to persistent immune activation during cART.

Participants were randomized to receive twice daily raltegravir 400mg, or hyper-immune bovine colostrum (HIBC) 1800mg, or raltegravir 400mg plus HIBC 1800mg, or placebo in a factorial, double-blind, placebo-controlled study. The primary endpoint was time-weighted area under the curve (TWAUC) for mean change in CD4+ T-cell count from baseline to week 24. CD4+ T-cell count and percentage, CD38+/HLA-DR+ expression on CD4+ and CD8+ T-cells (T-cell activation), lipopolysaccharide (LPS) and 16S rDNA (markers of microbial translocation) and soluble (s)CD14 (marker of monocyte activation) in plasma were measured at weeks 4, 8, 12, 24.

Seventy three subjects commenced therapy and follow-up. Treatment groups were balanced at entry. At randomisation participants had the following characteristics: mean (SD) duration of infection 11.6 (7.5) years, age 53.1 (10.2), nadir CD4+ T-cell count 79.0 (60) cells/μL, CD4+ T-cell count 208.8 (65.7) cells/μL and 53% of patients had CD4+ T-cell count >200 cells/μL. As compared to placebo, neither addition of raltegravir nor HIBC to cART, resulted in a significant difference in TWAUC in CD4+ T-cell count (mean difference 3.09 cells/μL; 95%CI: -14.27 to 20.45, p=0.724 and 9.43 cells/μL; 95%CI: -7.81 to 26.68, p=0.279, respectively - intention to treat). There was no significant interaction between HIBC and raltegravir (p=0.275). Neither was there any significant differences in changes from baseline CD4+ T-cell percentage, proportions of patients with CD4+ T-cells >350 cells/μL, CD38+HLA-DR+ expression or concentration of LPS, sCD14 and 16S rDNA

Intensification of a suppressive cART regimen with raltegravir or addition of HIBC was not associated with an increase in CD4+ T-cell count or changes in immune activation or microbial translocation as measured by CD38+/HLA-DR expression, LPS, sCD14 and 16S rDNA.



Theme B: Treatment and Monitoring – Clinical Studies: 2.00pm - 3.30pm

Antiretroviral therapy (ART) is effective in treating children infected with human immunodeficiency virus type 1 (HIV-1). There have been no large studies reporting on the response to antiretroviral treatments among Asian children infected with HIV.

To examine mortality and its associated risk factors in a cohort of HIV-infected children in Asia.

The Therapeutics Research, Education, and AIDS Training (TREAT Asia) Asia Pediatric HIV Observational Database (TAPHOD) was established in 2007 to monitor HIV disease natural history in treated and untreated children and adolescents in Asia. Data collection in TAPHOD was prospectively constituted in 2008; retrospective clinical data were provided from the date of first entry into the clinic. By the end of March 2009 we enrolled 2280 children from 12 clinics in 5 countries in TAPHOD.

Of 2280 children enrolled, 1752 (77%) received ART; 1480 started on three-drug combination ART(cART) mainly including non-nucleoside reverse transcriptase inhibitors (NNRTI; 93%). Median age at ART initiation was 6.5 years. During a median follow-up of 3.1 years after the start of treatment, 115 (6.6) children died (mortality rate: 1.9 per 100 child-years; 95% confidence interval [CI]: 1.6-2.4). The median age at death was 7.7 years. Of these deaths, 43 (37.3%) occurred within 3 months of therapy initiation with 8 deaths reported as AIDS related; (early mortality rate: 10.2 per 100 child-years; post-12-month mortality rate: 0.9 per 100 child-years). Of 528 who never received ART, 36 died (mortality rate: 4.1 per 100 child-years; 95% CI: 3.0-5.7). In the multivariate Cox proportional hazard analysis on those who started ART, the risk of mortality was significantly higher in children with baseline WHO stage 4 vs. stage 1 and 2 (Hazard ratio [HR]: 4.78) and in children who had lower weight-for-age z score (HR: 0.10). The hazard was highest (HR: 33.85) for children with CD4<5% (treated as a time dependent variable) relative to those with CD4≥20%.

Analyses of data in TAPHOD showed that the overall response to cART in Asian populations is similar to that reported in Western countries. Highest mortality during the first 3 months of ART supports the urgent need for early diagnosis and treatment.

Paper Number: 380
SURVIVAL OF HIV-INFECTED
CHILDREN: A COHORT STUDY
FROM THE ASIA-PACIFIC REGION

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Kumarasamy N⁷, Chochephaibulkit K⁸,
Nik Yusoff N⁹, Vonthanak S¹⁰, Siew
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Theme B: Treatment and Monitoring – Clinical Studies: 2.00pm - 3.30pm

Paper Number: 338
TREND OF CD4 CELL COUNT IN HIV-INFECTED PATIENTS WITH HIV VIRAL LOAD MONITORING WHILE ON COMBINATION ANTIRETROVIRAL TREATMENT: RESULTS FROM THE TREAT ASIA HIV OBSERVATIONAL DATABASE (TAHOD)

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In many Asian countries, second-line combination antiretroviral treatment (cART) is not widely accessible. Relevant to decisions about when to switch is how a patient's immune status might deteriorate if they persist with a virologically failing first-line cART. The aim of this study was to examine the relationship between trends in CD4 counts (slope) and HIV viral load (VL) after cART initiation in Asian patients in TAHOD.

Treatment-naïve HIV-infected patients who started ≥ 3 -drug cART and had ≥ 3 CD4 count and HIV VL tests were included. CD4 slopes were expressed as changes of cells per μL per year. Predictors of CD4 slopes more than 6 months after initiation were assessed by random-effects linear regression models.

A total of 1676 patients (74% male) were included. The median time on cART was 4.2 years (IQR 2.5-5.8 years). In the final model, CD4 slope was associated with age (-4.8 cells/ μL per year per 10-year age increase, $p=0.013$), concurrent HIV VL (-40.5 per 1 log₁₀ copies/mL VL increase, $p<0.001$), concurrent CD4 count (+1.9 per 100 cells/ μL increase, $p=0.033$), disease stage (compared to no AIDS defining illness [ADI]: +26.3 if diagnosed with tuberculosis [TB] and/or other ADI, $p<0.001$; +12.0 if diagnosed with non-TB ADI, $p=0.013$), hepatitis B or C co-infection (-17.7 if co-infected, $p=0.004$), and time since cART initiation (compared to 6-12 months: -21.5 during 12-18 months, $p=0.010$; -25.8 during 18-24 months, $p=0.002$; -59.1 at 24 months or later, $p<0.001$). CD4 count continues to increase with HIV VL up to 20 000 copies/mL during 6-12 months after cART initiation. However, the HIV VL has to be controlled below 5 000, 4 000 and 500 copies/mL for the CD4 slope to remain above 20 cells/ μL per year during 12-18, 18-24, and beyond 24 months after cART initiation.

After cART initiation, CD4 counts continued to increase even when the concurrent HIV VL was detectable. However, HIV VL needed to be controlled at a lower level to maintain a positive CD4 slope when cART continues. The effect on long-term outcomes through the possible development of HIV drug resistance remains uncertain.

Theme B: Treatment and Monitoring – Clinical Studies: 2.00pm – 3.30pm

The proportion of patients in AHOD receiving combination antiretroviral treatment (cART) with detectable viral load (>400 copies/ml) decreased to 5% in the first six months of 2009. The extent to which this low observed rate of detectable viral load is due to differential follow-up patterns is uncertain. The objective of this analysis was to estimate long-term trends in the proportion of patients with detectable viral load while receiving cART, adjusted for patient covariates and differential follow-up.

Patients were included in analyses if they started cART (defined as three or more antiretrovirals) and had at least one viral load assessment after 1 January 1997. Gaps in treatment of more than 14 days were excluded from analyses.

The endpoint was detectable viral load in the first and second six months of each calendar year while receiving cART. Repeated measures logistic regression methods were used to account for within and between patient variability. Rates of detectable viral load were predicted for 1) all patients including those lost to follow-up or who died, 2) all patients who survived and 3) only those patients with a viral load assessment.

Analyses were based on 2,439 patients and 31,339 viral load assessments between 1 January 1997 and 31 March 2009. Younger age, previous mono or duo ART, previous detectable viral load, lower CD4 count, the 18 months immediately following cART initiation, earlier year of first cART, and earlier year of HIV diagnosis were all associated with an increased risk of detectable viral load. Compared with, the observed 5% rate of detectable viral load in the first six months of 2009, predicted rates of detectable viral load were 16%, 14% and 10% for scenarios 1), 2) and 3) above. Sensitivity analyses based only on prospective data gave similar results.

Predicted rates of detectable viral load were higher than observed rates when adjusted for covariates and differential follow-up. This has implications for estimates of HIV transmission in Australia from patients receiving cART.

A clinical audit aims to improve patient care and outcomes through systematic review of care against explicit criteria. In Australia, the Department of Health and Human Services (DHHS) guidelines for the treatment of HIV infection in adults and adolescents have been adopted, with Australian Commentary providing detailed guidance and recommendations for the local context. A large-scale audit was conducted in Sydney and Melbourne to assess adherence to the HIV treatment guidelines.

Case records of 500 sequential HIV-1 patients (identified from patient databases and pharmacy records) who initiated antiretroviral therapy (ART) sequentially from early 2004 to late 2008 were examined retrospectively from 2 high HIV caseload primary care and 2 hospital sites (125 patients/site). Information was collected on treating physician, patient demographics, reason for initiating ART and ART regimen, and the guideline recommendations (A,B,C) for patient management and monitoring, as well as co-morbid disease monitoring and HIV surrogate and clinical outcomes. Only data explicitly stated in the medical records was abstracted. Patient de-identified information was entered into a web-based database over 6 months by trained data collectors with HIV experience and knowledge. Each patient took on average 4 hours to complete. Central monitoring was conducted to ensure consistency. Data were collected on 4,228 patient visits: the initial visit for HIV care (no ART initiation; n=209), initiation of ART visit (n=500), visits (n=3211) following ART initiation (for up to 18 months or 10 visits) and the most recent visit (n=308) if this occurred >18 months after ART initiation.

The key changes in the Antiretroviral guidelines over time were summarised.

This audit has demonstrated the successful measurement of adherence to Australian guidelines for HIV therapy initiation. Barriers include time involved and need for data collectors with good HIV experience and knowledge.

The results of the audit will enable feedback on clinical practice to improve patient care in participating sites and the audit can be repeated in future, perhaps in a simplified format, to assess changes in adherence to treatment guidelines. There is potential to extend the guidelines audit to other sites that manage HIV.

Paper Number: 334
TRENDS IN DETECTABLE
VIRAL LOAD BY CALENDAR
YEAR IN THE AUSTRALIAN HIV
OBSERVATIONAL DATABASE

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Paper Number: 774
DEVELOPMENT OF AN AUDIT OF
ADHERENCE TO HIV TREATMENT
GUIDELINES FOR INITIATION OF
ANTIVIRAL THERAPY.

Cunningham N¹, Agrawal S¹, Sinn K², Armishaw J³, Pierce A³, Hoy J^{3,5}, Lau H⁴, Carr A², Roth N⁴, Andrianopoulos N⁵, Rayner C^{3,5}, Bloch M¹

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Theme B: Treatment and Monitoring – Clinical Studies: 2.00pm – 3.30pm

Paper Number: 827
ADHERENCE TO HIV TREATMENT
GUIDELINES FOR INITIATION OF
ANTIRETROVIRAL THERAPY AND
CHANGES IN ANTIRETROVIRAL
INITIATION IN AUSTRALIA

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Background: In Australia, the DHHS treatment guidelines have been adopted with an Australian Commentary. An audit was conducted to determine adherence to these guidelines.

Methods: Case records were examined of 500 sequential adults initiating ART in primary care and hospital sites (125 per site) in Sydney and Melbourne from 2004 through 2008. Data on ART initiation, regimen prescribed, and adherence to specific guidelines on patient management and monitoring were recorded. Therapy initiation was analysed by quartile: earliest (Q1; pre-June 4, 2006) and most recent (Q4; post-March 1, 2008).

Results: Of 500 subjects initiating ART (by 54 physicians with mean 14 years HIV experience), 95% were male (mean age 40 years, CD4 count 287 cells/ μ L, HIV RNA 89,000 copies/mL). ART initiation was mean 3.1 years post diagnosis, via clinical trial in 20.4% and hospital in-patient in 7.7%. For "When to start", adherence to Dec 1 2009 guidelines was 91%, 82% for Nov 3 2008 guidelines, and 88% for guidelines current at ART initiation. The mean CD4 counts at ART initiation were 291 and 290 cells/ μ L in Q1 versus Q4, respectively ($p=ns$). Preferred or alternative regimens were prescribed (excluding patients receiving experimental clinical trial regimens) in 79%, 90%, and 89%, according to 2009, 2008 and guidelines current at ART initiation, respectively. Contraindicated ART was prescribed in 4%. Strong recommendations (Level A) in 2008 guidelines were adhered to variably: for hepatitis serology (74%), oral/dental check (63%), fasting lipids (52%), fasting glucose (47%), resistance testing (48%), gonorrhea screening (36%), pap smear (32%), urinalysis (26%), and TB testing (9%). ART at initiation was 33% PI-based and 54% NNRTI-based in Q1, and 25% PI-based and 61% NNRTI-based in Q4. From Q1 to Q4, NRTI backbone of tenofovir/emtricitabine increased from 33% to 85%, abacavir/lamivudine decreased from 15% to 11%, and zidovudine/lamivudine decreased from 22% to 3%; the most frequently initiated PI in Q1 was lopinavir/ritonavir (71%) and in Q4 was atazanavir (70%).

Conclusions: HIV treatment guidelines in primary care and hospital sites in Australia have been largely adhered to for when to start and what to start with, but less closely followed for co-morbidity related parameters.



Theme D: IDU, Risk and Harm Reduction in Indonesia: 2.00pm - 3.30pm

There are two major IDU services available in Indonesia, i.e.. methadone maintenance treatment (MMT) and needle-syringe programs (NSP). Even though the number of such services is increasing, little is known about service provision and utilities among women IDU. This study was conducted to explore factors related to the use of harm reduction services by women IDU in Yogyakarta and Central Java Provinces.

The study was conducted by doing in-depth interviews with 19 women IDU who had injected drugs in the previous one month from Yogyakarta (2), Solo (10) and Salatiga (7). A questionnaire was administered for demographic and behavioural data.

In all three cities, MMT and NSP services are delivered by outreach workers (ORW) in coordination with public health centres (Puskesmas). ORWs in Yogyakarta work under the Provincial AIDS Commission, whereas in Solo and Salatiga they work under NGOs (Mitra Alam and Performa). ORWs were assigned to provide information on HIV, distribute packages that consist of needles, condoms, and alcohol swabs. Methadone is provided in appointed health centres.

The mean age of the women was 26 years. Both women from Yogyakarta and none from Solo and Salatiga accessed MMT. Reasons given for accessing MMT were that it reduced the frequency of injecting heroin and that it made them feel healthy and able to live a normal life. Reasons for not accessing MMT in Solo and Salatiga were that they had not heard of methadone, did not want to take methadone, reluctant to go a public service and to queue, and preferred to use Subutex. The majority of these women obtained sterile needles and syringes from ORW but many of them also still bought them from drugstores. Those who bought from drug stores argued that they were sometimes reluctant to request needles from ORW for various reasons (eg it took too long to get the needle, self-stigma, the ORW annoyed them, etc).

There are differences in service access and provision in the three cities. Furthermore there are various reasons for not accessing these services. Strategies to increase access and improve service delivery are needed.

Paper Number: 662
IDU SERVICE AND UTILITIES
AMONG WOMEN INJECTING
DRUG USERS IN 3 CITIES IN
YOGYAKARTA AND CENTRAL
JAVA PROVINCE

Subronto YW¹, Saktiawati AMI¹,
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University of New South Wales,
Sydney, NSW, Australia

Since April 2008, HIV Cooperation Program for Indonesia (HCPI) has provided support for a harm reduction response for IDUs in Indonesian prisons. The objective is to support the development and implementation of an effective and sustainable approach to HIV prevention in the prisons system.

In the last 18 months, HCPI has giving attention to mentoring as a primary means of building and accelerating the harm reduction response for prisoners in Java and Bali. Intensive mentoring activities have been carried out nationally, provincially and at selected prisons using a variety of techniques to improve HIV prevention and care, as well as giving attention to service management.

Completion of the National Drugs and HIV/AIDS Action Plan for prisons 2010-2014, signed by Minister of Law and Human Rights

Establishment of National HIV Prison Education Program to 54 prisons

HIV counseling and testing services are now available in 20 prisons

Management capacity of HIV Prison Program has been strengthened at 7 provincial offices

Establishment of 7 referral prisons as a model for HIV/AIDS comprehensive prevention and care program (3 also provide follow-up for ART)

Establishment of a national database system for HIV/AIDS recording and reporting within the prison system

Availability of methadone has been increased to a total of 6 Prisons in Java/Bali

These results show that effective mentoring is an important strategy for assisting the Ministry of Law and Human Rights to achieve their goal for accelerating the harm reduction response in prisons. Many challenges remain but HCPI and the Ministry are committed to developing an effective and sustainable response to the service needs of incarcerated IDUs.

Paper Number: 783
MENTORING: A WAY TO
ACCELERATE HIV HARM
REDUCTION RESPONSE FOR
PRISONERS IN JAVA AND BALI,
INDONESIA

Hartanti A¹, ZamZam A¹, Aman
M², Sulistyati E², YerusRussalam Y¹,
Silitonga N¹

¹HIV Cooperation Program for
Indonesia (HCPI);

²Ministry of Law and Human Rights

Theme D: IDU, Risk and Harm Reduction in Indonesia: 2.00pm - 3.30pm

Paper Number: 138
RISKY PRACTICES ASSOCIATED
WITH HIV/AIDS IN GUNUNG SARI
PRISON, MAKASSAR, INDONESIA

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South Sulawesi, Indonesia

Studies show that prisons are a high risk environment for HIV/AIDS. Indonesian Ministry of Health (MOH) reported that HIV prevalence among prisoners in Indonesia was 24.5% in 2004. To date, no studies have been conducted in Indonesia exploring the social and environmental factors relating to HIV/AIDS in prison. This study is conducted in Gunung Sari Prison in Makassar which is the largest prison in South Sulawesi Province with 496 male inmates.

The aim of the study is to investigate risky practices and behavior associated with HIV/AIDS. In-depth interview were conducted with 21 people including 15 inmates and 6 staff. Six of the interviewees are HIV positive.

Results show that there are numerous risky practices which the inmates engage in. The interviews revealed the importance of peer pressure in mediating risky practices which include anal sex, implanting penis accessories, sharing needles, sharing razor blades and unsafe tattooing. Condoms and lubricant were never used because they were not available in the prison. Inmates complained about the unavailability of a private room to have sex when their partner visited, which often resulted in them having anal or oral sex with other inmates. Implanting penis accessories which results in considerable bleeding was found to be a very common practice by most inmates. The knowledge of HIV/AIDS is low despite the many seminar and workshops conducted within the prison.

Risky practices that potentially lead to HIV infection need to be understood in the context of the prison environment such as peer pressure, lack of human rights, and limited access to condoms and lubricant. We conclude that in spite of the HIV/AIDS prevention programs established in prison by the National Strategy for the Control of HIV/AIDS and Drug Use in Prison since 2005, the reality is that there is minimal knowledge about risk behaviour, and a lack of acknowledgement and response to the numerous risky practices which place many inmates at risk of HIV.

Paper Number: 686
FEMALE IDU AND THE ROLE OF
MALE PARTNER AND FRIEND IN
CENTRAL JAVA, INDONESIA

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CJ², Padmawati RS¹, Subronto Y¹,
Worth H.²

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Australia

International research with female IDUs has shown that gender issues contribute to HIV risk. Dependency on male partners is a common theme. Little is known about female IDU and HIV risk in Indonesia, so a study with female IDU was conducted. This paper addresses the role of males and dependency on males amongst female IDUs in central Java.

Nineteen females who had injected drugs in the previous month in Central Java were interviewed. Qualitative data was analysed using grounded theory. The mean age was 26.

The social world of the women in this study tended to be male dominated: most IDU are male and the women's social group was often restricted to a small group of male IDU. Male friends or partners introduced most of the women to IDU and played a major role in the provision of drugs and needles. Despite some reliance on men, women were also able to obtain needles via outreach workers and pharmacists and to negotiate safe injecting. Women were less able to ensure safe sex. They found it particularly difficult to buy condoms and had difficulties in telling partners to use condoms. This seemed to be more about considering the feelings of their partners than being coerced by partners. The women were also somewhat reluctant to use condoms themselves as they found them uncomfortable. Despite literature describing women as lacking power and Indonesian culture that requires women to be submissive, the women were often quite independent and regarded themselves as equal to men. They could obtain their own needles and some were quite assertive in refusing to share a needle. Therefore, the greater difficulty in negotiating safe sex appeared to be related to a number of cultural and physical factors but coercion was not typically mentioned.

Drug use and premarital sex by women is disapproved of in Javanese society, but tolerated among men. The notion of a 'good' woman contributes to the dependency of women who inject drugs on men. However, contrary to expectations, in spite of male domination, these women were not completely powerless or dependent on men.



Theme D: IDU, Risk and Harm Reduction in Indonesia: 2.00pm - 3.30pm

About half of the injecting drug users in Indonesia have been found to have HIV. However, generally less than 10% of IDU study samples are female so little is known about female IDU in Indonesia.

International research with female IDU has identified that gender can influence drug use behaviours and associated risks. Social, economic and political inequalities between men and women have been posited to contribute to HIV risk for women. Female IDU have been found to experience partner violence and to rely on their partner to inject them. Such factors have been shown to increase the likelihood of women sharing injecting equipment. As little is known about women who inject drugs in Indonesia, a study with female IDU in central Java was conducted. This paper explores factors related to sharing injecting equipment for these women.

In-depth interviews were conducted with 19 women in central Java who had injected drugs in the previous 12 months. A multiple-choice questionnaire was also administered for demographic and behavioural data. Mean age was 26 years; all but one was employed or at college. In the previous year, half had a regular partner (nearly all injected drugs), 41% had a non-regular partner and 11% reported commercial sex; all had injected putaw and 32% had used a needle after someone else. Qualitative data was analysed using grounded theory.

Many of the women were assertive rather than powerless in negotiating injecting with friends/partner. Friends/partners did not generally coerce women to share; a culture of mutual respect was apparent. However the women were particularly concerned about the stigma associated with being a female who injects drugs, so they restricted drug use to a small, closed circle of trusted friends. In fact, their social circles appeared to be restricted to their using friends. Sharing was sometimes a means of enhancing that bond with friends or partner.

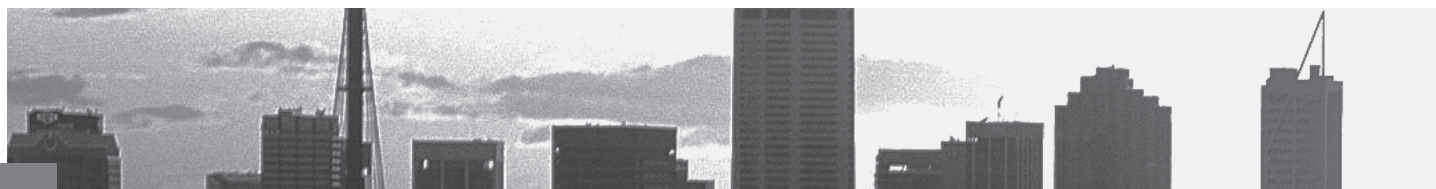
An apparent paradox existed, with women concerned about HIV, but sharing if the person was a friend or partner. It appeared that, for some, HIV was lower in the priority list than bonding with peers or partner. This could be because most lived away from family and had few friends in a culture where family and social ties are important. Strategies to reduce the stigma of IDU by women in Indonesia could assist female IDU to expand social networks.

Paper Number: 540
NEEDLE SHARING BY FEMALE
IDU IN CENTRAL JAVA,
INDONESIA

Spooner CJ¹, Saktiawati AMI²,
Lazuardi E², Padmawati RS²,
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Yogyakarta, Java, Indonesia,

Friday 22 October
2.00pm - 3.30pm



Addressing the needs and exploring the responses of affected communities to HIV in PNG and the Pacific. Presented by ASHM and the HIV Consortium: 2.00pm – 3.30pm

The needs of affected communities are now more strongly informing the response to HIV in Papua New Guinea and the Pacific. This session will explore how the needs of affected communities are being understood and addressed in PNG and the Pacific and how access to services can be increased, as well as how affected communities are engaging within the response. The session will be chaired by Jason Mitchell (Fiji) and John Millan (PNG) who will facilitate a discussion drawing together themes, and identifying successful strategies for our region.

Paper Number: 501
ADDRESSING THE NEEDS OF MOST-AT-RISK POPULATIONS IN THE HIV EPIDEMIC IN PAPUA NEW GUINEA

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Keywords; HIV, MARPs, High Risk, Low Risk, FSW, MSM, Collaborative Partnership

Papua New Guinea (PNG) has one of the few generalized HIV epidemics in Asia and the Pacific. A key factor driving the HIV epidemic is the high prevalence and incidence of sexually transmitted infections (STIs) in PNG. A major concern is that most-at-risk populations (MARPs - including female sex workers, men who have sex with men, male sex workers and transgender) with symptomatic STI lack access to medical services because of stigma, discrimination and ignorance about STIs. Additionally, most mainstream STI and HIV clinics are not appropriate for MARPs and are generally not MARPs-friendly. Unsurprisingly, clinic attendance by MARPs is low.

The Helpim Bilong Yumi Project (meaning "Our Help") was started in September, 2005 in partnership with Family Health International, the National Department of Health and HOPE worldwide as the implementing agency through the 9 Mile Urban Clinic in Port Moresby. The aim of this partnership was to provide an integrated, user-friendly prevention, care and treatment service for STIs and HIV for MARPs and increase accessibility and clinic attendance.

Despite many challenges, the STI and HIV services provided through this collaborative partnership have increased attendance by MARPs.

From 2007 to May 2010, 6,061 patients were seen through the Project at 9 Mile clinic and, of these, 4,218 were MARP patients. A total of 3,671 of these patients had VCT and, of these, 219 were confirmed HIV-infected. A total of 135 MARPs are currently active on care and treatment including 47 on ART.

Thus, over the past four years, more than 50% of all people seen at the clinic were MARPs and about 6% of these patients have been diagnosed with HIV.

It can be expected that the PNG HIV epidemic will worsen if the needs of MARPs are not adequately addressed. Therefore, access to MARPs-friendly services will need to expand to address their needs.





Addressing the needs and exploring the responses of affected communities to HIV in PNG and the Pacific. Presented by ASHM and the HIV Consortium: 2.00pm – 3.30pm

Friends Frangipani is formed by sex workers from different provinces of PNG, with an elected Executive including MSM and Transgender representatives. We have worked with Scarlet Alliance in a capacity development partnership since 2004.

6 years ago there was little understanding of sex workers rights. Most of us were forced to have sex without condoms, and clients took control and paid less money to us. When accessing clinical services our information was not kept confidential. Now, because of representation from Friends Frangipani, understanding of sex worker rights is growing. Our community advocates have attended forums and brought the experiences and needs of sex workers into the HIV response.

Sex work is criminalised in PNG. This creates barriers to accessing services and continuing treatment regimes because of stigma and discrimination, leading to poor health of sex workers. Criminalisation also means that sex workers have less power in negotiating condom use and choosing clients, sex workers being forced to have unprotected sex by clients or police or sexual violence by clients.

Decriminalisation of sex work and same-sex activity in our country will help us to move freely and access treatment from service providers, and we can be respected like everyone else.

Decriminalisation is one of the Aims that Friends Frangipani is working towards. There is support from Dame Carol Kidu, who has formed a working group from different NGOs to share approaches and ideas.

We have learnt many skills and ideas from international sex workers and their organisations on how to run an organisation, and work with our members with different levels of education and understanding.

However, as we develop our own ways of operating a sex worker organisation there are challenges including the differences in PNG of sex working experiences.

Friends Frangipani is working on their Strategic Plan. This will be the vision for the future.

We participated in the National HIV Strategy process and see the importance of a place for sex worker advocacy in the ongoing response to HIV in Papua New Guinea.

The Poro Sapot Project (PSP), implemented by Save the Children PNG in Port Moresby, Lae, Goroka and Kainantu, aims to reduce the negative impact of HIV on selected groups in Papua New Guinea. This unique and successful project achieves its aims through the use of a peer outreach model to improve the safe sex behaviour and well-being of female sex workers [FSW] and men who have sex with men (including transgendered people) [MSM]. The success of this project can be seen by the increase in HIV+ FSW and MSM who have been diagnosed and who are now becoming involved in the project.

To address the issue of how to support and involve positive people within the PSP a GIPA (Greater Involvement of PLHIV) Audit was conducted in April 2009 by a team of four people living with HIV. The GIPA Audit aimed to: assess how PSP has worked with people living with HIV, including the strengths and weaknesses of that work; share experiences; develop local skills for performing such an audit; and recommend ways to incorporate these concepts into ongoing work.

The GIPA Audit Team found: that several activities by and for PLHIV had already been successfully conducted at PSP; that a wide variety of ongoing care activities for HIV+ FSW and MSM had been willingly conducted by staff and volunteers, usually beyond their role descriptions and often utilising their own resources; and that most positive staff and volunteers within PSP seemed to be hidden behind a veil of secrecy around being HIV+.

A year on from the GIPA Audit some excellent progress has been made in advancing the cause of GIPA, in spite of the many challenges. Their successes have included progress on developing the PSP code of conduct towards positive people and a workplace policy, the establishment of small vibrant peer support groups of positive women and men in Lae and Port Moresby, an increase in collaborations between PSP and local PLHIV groups, and more PSP staff and volunteers being open in their workplace about being positive.

**Paper Number: 812
FRIENDS FRANGIPANI: THE SEX
WORKER RESPONSE TO HIV IN
PAPUA NEW GUINEA**

Lahui, DM

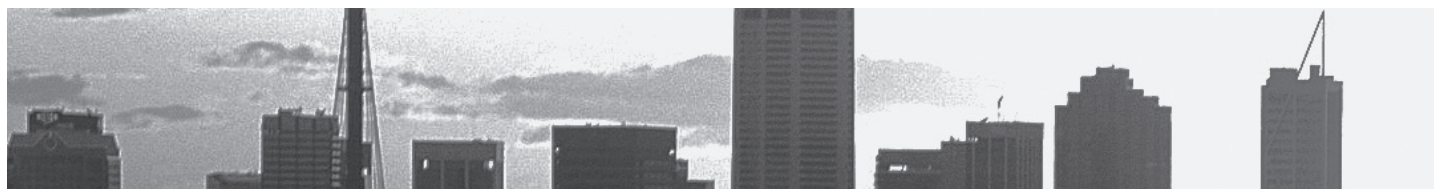
Friends Frangipani Association, Port Moresby, NCD PNG

**Paper Number: 351
RISING TO THE CHALLENGE
OF INVOLVING POSITIVE SEX
WORKERS AND MEN WHO HAVE
SEX WITH MEN IN PAPUA NEW
GUINEA**

Evera N , Baldwin R² , Elaripe M³ , Kisa D⁴

¹Poro Sapot Project, Save the Children, Port Moresby, NCD, Papua New Guinea; ²Asia Pacific Network of PLHIV, Bangkok, Thailand; ³PNG-Australia HIV&AIDS Program – AusAID, Port Moresby, NCD, Papua New Guinea; ⁴Poro Sapot Project, Save the Children, Port Moresby, NCD, Papua New Guinea.

Friday 22 October
2.00pm – 3.30pm



Friday 22 October
2.00pm – 3.30pm

Addressing the needs and exploring the responses of affected communities to HIV in PNG and the Pacific. Presented by ASHM and the HIV Consortium: 2.00pm – 3.30pm

**Paper Number: 740
KEY FINDINGS FROM A
BEHAVIOURAL SURVEY OF MEN
WHO HAVE SEX WITH MEN AND
AKAVAI IN RAROTONGA AND
AITUTAKI, THE COOK ISLANDS**

Rawstone P¹, Paitai T², Futter-Puati D³, File A³, Duffy G⁴, Hansen L⁴

¹School of Public Health and Community Medicine, The University of New South Wales, Sydney, Australia; ²Te Tiare Association, Rarotonga, Cook Islands; ³Cook Islands Ministry of Health, Rarotonga, Cook Islands; ⁴Secretariat of the Pacific Community, Nouméa, New Caledonia

Cook Islands has a low HIV prevalence according to limited surveillance data, but a recent survey amongst women attending antenatal clinics showed relatively high rates of other sexually transmitted infections (STIs). There has been no comprehensive behavioural data on men who have sex with men (MSM) and akavaine (transgender) in the Cook Islands. This paper reports key findings from the first behavioural survey of MSM and akavaine conducted in 2009.

Chain referral recruitment was used to access the akavaine and MSM communities. The confidential questionnaire was administered using Personal Digital Assistants (PDAs). Questions included demographics, sexual behaviour, drug and alcohol use, knowledge and attitudes towards HIV and people living with HIV, and access to services.

84 participants completed the questionnaire of whom 40 were akavaine (48%) and 44 MSM (52%), with a mean age of 30. Most (55%) had completed secondary school or higher education. 75 (89%) had ever had sex: 85% reported ever having sex with other men, 32% with akavaine, and 59% with women. Condom use rates at last encounter with each of these partner groups was 62% for anal intercourse with akavaine, 55% with other men, and 67% for vaginal or anal intercourse with women. Concurrent sexual relationships in the last 6 months with akavaine, male, or female partners was 40%. 21% reported being forced to have sex in the same period and 5% had injected drugs. Knowledge about HIV transmission was relatively high.

Given relatively low levels of condom use, high levels of concurrent partnerships, and experience of forced sex, MSM and akavaine communities would benefit from programs focussing on the importance of consistent condom use, and building skills in negotiating safer sex. A campaign to raise awareness of sexual violence and promote respect for all sexualities may be of value.

**Paper Number: 913
IMPLEMENTING HIV
CONFIRMATORY TESTING IN
PACIFIC ISLAND COUNTRIES AND
TERRITORIES**

Blair DH¹, Duffy GM¹, Best S², Wilson K² and Garvez AM¹

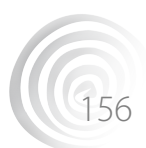
¹Secretariat of the Pacific Community, Noumea, New Caledonia; ²National Serology Reference Laboratory, Melbourne, VIC, Australia

Until recently, very few Pacific Island Countries and Territories (PICTs) had the capacity to perform in-country HIV confirmatory testing. While many PICTs have been performing HIV screening using the Inverness Determine® HIV1/2 () rapid test for some time, reactive samples then had to be referred internationally to one of several reference laboratories for confirmatory testing. Shipping such specimens internationally has, however, proven to be unreliable with long turnaround times or degradation of specimens rendering them untestable. Maintaining a system in which international specimen referral is an essential step in the HIV testing algorithm is, therefore, not sustainable in the long-term.

In 2008, regional development partners met in an effort to address this problem. The Pacific HIV Testing Task Force (HTTF), comprising members of numerous organisations, was created and charged with overseeing the development of a rapid test based algorithm which could yield in-country confirmed HIV test results. The HTTF adopted a classic three-phased validation approach and work on evaluating five candidate rapid tests with specimens from PICTs commenced.

Despite considerable work and progress since the 2008 meeting, in early 2010, almost two years since the HTTF was established, it became evident that with the existing three-phase strategy in-country confirmatory testing was unlikely to be rolled out extensively for another one to two years. This long time frame was a concern as it meant that delays in delivery of confirmed HIV status would continue for the foreseeable future. The repercussions of such a delay were exemplified by several known instances in which delayed confirmatory testing for pregnant women is thought to have contributed to vertical HIV transmission.

Here we briefly describe the difficulties experienced with the original strategy, how relatively minor revisions enabled greatly expedited implementation of a validated HIV testing algorithm and discuss important observations made during the roll out process.





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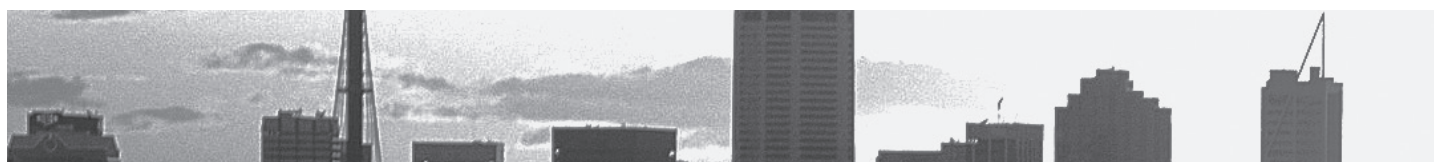
Wednesday 20 - Friday 22 October 2010
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POSTER LISTING

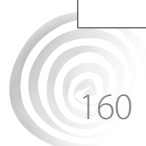


THEME A

POSTER NUMBER	LAST NAME	FIRST NAME	SPEAKERS PAPER TITLE
115	Campbell	Amber	THE HIV-1 PRE-INTEGRATION COMPLEX PROTEINS VPR AND IN INTERACT WITH THE CARGO BINDING SUBUNITS OF THE MICROTUBULE-BASED MOTOR DYNEIN
116	Chew	Constance	PLASMA CHEMOKINE LEVELS CCL5, CXCL10, ARE ALTERED IN MALAYSIAN HIV PATIENTS ON HIGHLY ACTIVE ANTIRETROVIRAL THERAPY
117	Fernandez	Sonia	NATURAL CONTROL OF HIV INFECTION IS ASSOCIATED WITH IgG1 AND IgG2 ANTIBODIES TO HIV p24
118	Munawwar	Arshi	CYTOMEGALOVIRUS SHEDDING IN HIV INFECTED PATIENTS IS SIGNIFICANTLY HIGHER IN SEMEN THAN BLOOD PLASMA.
119	Petravic	Janka	VACCINATION-INDUCED NONCYTOLYTIC EFFECTS IN THE ACUTE PHASE OF SHIV INFECTION
120	Poon	Selina	ROLE OF TAT IN INCREASED HIV-1 SPREAD AND INFECTION, A STRUCTURAL MODEL
121	Rajapaksa	Ushani	THE ROLE OF POLYMORPHIC CYTOPLASMIC DOMAIN OF HLA CLASS I IN HIV-NEF MEDIATED PATHOGENESIS
122	Shih	Ivy	CHARACTERISATION OF THE VIRAL SPREAD BETWEEN HUMAN IMMUNODEFICIENCY VIRUS (HIV) INFECTED CD4+ T-CELLS AND UNINFECTED DENDRITIC CELLS (DCs)
123	Tan	Dino	INDUCTION OF TNF α AND IL-12 VIA TLR2 CAN EXPLAIN CASES OF TB IRD
124	Telwatte	Sushama	INVESTIGATING THE IMPACT OF APOBEC3F ON EARLY HIV-1 REPLICATION
125	Wienholt	Louise	AN UNUSUAL CASE OF HIV SEROCONVERSION - DIAGNOSTIC AND PROGNOSTIC IMPLICATIONS



THEME B			
POSTER NUMBER	LAST NAME	FIRST NAME	SPEAKERS PAPER TITLE
ADHERENCE			
126	Anekthananon	Thanomsak	HIV RISK BEHAVIOR AMONG HIV-INFECTED PEOPLE IN SIX HOSPITALS, THAILAND, 2008-2009
127	Auchieng	Chatsuda	ASSESSMENT OF STUDY PARTICIPANTS SATISFACTION OF SERVICES PROVIDED BY A CLINICAL RESEARCH ORGANIZATION IN BANGKOK
128	Baker	David	GENERAL PRACTICE CLINICS CAN TREAT HIV PATIENTS FOR HEPATITIS B, WHY NOT ALL PATIENTS?
129	Costello	Katharine	PILOT MODEL OF NURSING COORDINATION FOR HIV POSITIVE CLIENTS AT SOUTHERN HEALTH, MELBOURNE
130	Feeney	Lance	IN 2010, PEOPLE WITH HIV HAVE EVOLVING NEEDS FROM HEALTH SERVICES: A PILOT PROJECT OFFERING HEALTH ADVOCACY, LITERACY AND PEER SUPPORT
131	Garsia	Roger	DEVELOPMENT OF A SECURE, MULTIDISCIPLINARY HIV CLINIC ELECTRONIC MEDICAL RECORD (EMR) USING CERNER MODULES
132	Huffam	Sarah	QUALITY IMPROVEMENT IN OBSERVATIONAL HIV CLINICAL DATA, AT PROVINCIAL SITES IN CAMBODIA
133	Indriani	Citra	SOCIO-DEMOGRAPHIC AND CLINICAL CHARACTERISTICS ASSOCIATED WITH ADHERENCE TO HIGHLY ACTIVE ANTIRETROVIRAL THERAPY IN HIV-INFECTED ADULTS IN YOGYAKARTA, INDONESIA
134	Jebakumar	Sinna	MANAGEMENT OF DIFFICULT HIV PATIENTS(POSTER PRESENTATION) AUDIT:VALUE OF DIRECTLY OBSERVED THERAPY WITH OLDER GENERATION OF ANTIRETRIVIRALS PRIOR TO STARTING ON NEW ANTIRETROVIRALS;EXPERIENCE FROM A RESOURCE POOR SETTING IN UNITED KINGDOM(UK)
135	Jiamsakul	Awachana	TASER-M : A REVIEW OF THE COHORT AND GENOTYPE SEQUENCE FILE TRANSFERS A DATA MANAGEMENT PERSPECTIVE.
136	Johnson	Casper	PEOPLE LIVING WITH HIV/AIDS AS PEER EDUCATORS/ COUNSELLORS: A STUDY AT THE GOVERNMENT HOSPITAL OF THORACIC MEDICINE TAMBARAM, (GHTM) INDIA.
137	Koelmeyer	Rachel	FACTORS ASSOCIATED WITH DIFFICULTY TAKING ANTIRETROVIRAL MEDICATION IN AN AUSTRALIAN SAMPLE OF PEOPLE LIVING WITH HIV
138	Liberali	Sharon	A REVIEW AND COMPARISON OF THE ORAL HEALTH STATUS AND SOCIAL IMPACT OF ORAL CONDITIONS AMONG HIV PATIENTS WITH THAT OF GENERAL DENTAL PATIENTS RECEIVING PUBLICALLY FUNDED DENTAL CARE IN SOUTH AUSTRALIA.



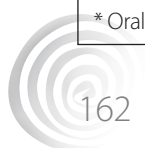


139	McDonald	Jennifer McDonald	CONDUITS AND CONTINUITY - BRIDGING THE GAPS FOR HIV TREATMENTS INFORMATION SUPPORT
140	Mek	Agnes	CHALLENGES OF ANITRETROVIRAL THERAPY (ART) IN PAPUA NEW GUINEA (PNG) - ART IS OUR RESERECTION THERAPY AND IT IS OUR LIFE
141	Newman	Christy	WHY BE AN 'HIV DOCTOR'? KEY INFORMANT INTERVIEWS IN THE HIV GENERAL PRACTICE WORKFORCE PROJECT
142	Ogier	Adrian	BETTER HEALTH THROUGH WORDS AND PICTURES: THE ROLE OF AN HIV COMMUNITY MAGAZINE
143	O'Sullivan	Grant	THE IMPACT OF INSOMNIA TREATMENT GROUP ON THE HEALTH AND WELLBEING OF TWO HIV POSITIVE MEN
144	Purcell	Ann	SOUTH AUSTRALIAN HIV/AIDS PRIMARY CARE COORDINATION PROGRAM
145	Purnomo	Julianita	HAART TO HEART: ENGAGING PEOPLE LIVING WITH HIV IN NUTRITION AND EXERCISE INTERVENTIONS
146	Purwaningsih	Sri	FIVE YEARS OF HIV AND AIDS SERVICES IN DR. SARDJITO TEACHING HOSPITAL, YOGYAKARTA, INDONESIA
147	Romiri	Michael	FRIENDLY CARER ASSOCIATION BREAKING THE BARRIER OF SILENCE
148	Sanekhanhya	Bounhueng	BASELINE HEALTH AND NUTRITIONAL STATUS OF PEOPLE LIVING WITH HIV ATTENDING THE HIV AND NUTRITION CLINIC IN CHAMPASAK PROVINCIAL HOSPITAL, LAO PDR
149	Siwi	lillian	THE USE OF PHOTO NARRATIVE AS METHOD FOR SELF-EXPRESSION OF PEOPLE LIVING WITH HIV/AIDS: A CASE STUDY OF A CARE CENTRE IN THE EASTERN HIGHLANDS PROVINCE OF PAPUA NEW GUINEA
150	Smith	Campbell	HIV NUTRITION SUPPORT PROJECT ADDRESSING FOOD SECURITY AND SOCIAL ISOLATION IN THE COMMUNITY
151	Suryadarma	Ardhany	SUPPORTING PSYCHO SOCIAL ECONOMY WITH THE GIPA/ GMPUD SPIRIT AT RUMAH CEMARA
152	Zillmann	Janelle	HIV PATHWAYS PROJECT 2009 A QUEENSLAND MODEL FOR CO-ORDINATED CARE



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154	Doyle	Joseph	NEWLY DIAGNOSED HIV SEROCONVERSION AND ACUTE HEPATITIS C
155	Jantarapakde	Jureeporn	THE PREVALENCE OF METABOLIC SYNDROME AMONG THAI HIV-INFECTED PATIENTS IN MTCT-PLUS OUTPATIENT CLINIC USING AMERICAN HEART ASSOCIATION (AHA) AND NATIONAL HEART LUNG AND BLOOD INSTITUTE (NHLBI) CRITERIA
156	Libertino	Samantha	VITAMIN D DEFICIENCY IS PREVALENT AMONGST HIV PATIENTS ATTENDING FREMANTLE HOSPITAL, AND INCREASED SKIN PIGMENTATION IS A MAJOR RISK FACTOR.
157*	Oliver	Benjamin	INTERFERON-GAMMA AND IL-5 PRODUCTION CORRELATE DIRECTLY IN HIV PATIENTS CO-INFECTED WITH MYCOBACTERIUM TUBERCULOSIS WITH OR WITHOUT IMMUNE RESTORATION DISEASE
158	Post	Jeffrey	ALTERATIONS IN IMMUNE FUNCTION AND ASSOCIATION OF ANTI-HCV SPECIFIC IMMUNE RESPONSES WITH ELEVATIONS IN ALANINE AMINOTRANSFERASE LEVELS IN PEOPLE WITH HIV AND HCV COINFECTION AFTER COMMENCEMENT OF COMBINATION ANTIRETROVIRAL THERAPY
159	Yong	Michelle	DO STATINS REDUCE THE RISK OF FRACTURE IN PEOPLE WITH HIV?

* Oral Poster





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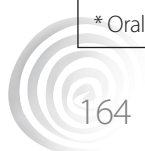
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160	Airth	Lorraine	THE TREATMENT & MANAGEMENT OF RECTAL CHLAMYDIA IN HIV+ MEN IN AN INFECTIOUS DISEASES OUTPATIENT DEPARTMENT
161	Bain	Peggy	RECOGNISING COMPLAINTS OF EARLY HIV-ASSOCIATED NEUROCOGNITIVE DISORDER IN CLINICAL PRACTICE AND CONSIDERATION OF ADDITIONAL RISK FACTORS ON COGNITIVE IMPAIRMENT.
162	Carr	Andrew	GENOTYPIC ANTIRETROVIRAL RESISTANCE TESTING (GART) ASSISTED HUMAN IMMUNODEFICIENCY VIRUS (HIV) TREATMENT VERSUS CLINICAL JUDGEMENT ALONE: A COST-EFFECTIVENESS ANALYSIS
163	Downing	Sandra	LATENT TUBERCULOSIS SCREENING USING INTERFERON-GAMMA RELEASE ASSAY; A DESCRIPTIVE STUDY, CAIRNS SEXUAL HEALTH SERVICE
164	Haskelberg	Hila	HIV DRUG RESISTANCE AMONG TREATMENT-NAÏVE PATIENTS RANDOMISED TO THREE DIFFERENT COMBINATION ANTIRETROVIRAL REGIMENS IN THE ALTAIR STUDY
165	Kelly	Mark	AUDIT OF A CLINICAL ALGORITHM FOR THE MANAGEMENT OF PROTEINURIA IN PATIENTS WITH HIV
166	Lee	Hsin-Chun	CHRONIC PARVOVIRUS B19 INFECTION REFRACTORY TO INTRAVENOUS IMMUNOGLOBULIN TREATMENT IN AN AIDS PATIENT
167	McManus	Hamish	DOES USE OF ANTIRETROVIRAL THERAPY REGIMENS WITH HIGH CENTRAL NERVOUS SYSTEM PENETRATION IMPROVE SURVIVAL IN HIV-INFECTED ADULTS?
168	Oliver	Benjamin	MEDIATORS OF INNATE AND ADAPTIVE IMMUNE RESPONSES DIFFERENTIALLY AFFECT IMMUNE RESTORATION DISEASE ASSOCIATED WITH MYCOBACTERIUM TUBERCULOSIS IN HIV PATIENTS BEGINNING ART
169	Oyomopito	Rebecca	THE TREAT ASIA STUDIES TO EVALUATE RESISTANCE MONITORING STUDY (TASER M) - COHORT PROFILE
170	Post	Jeffrey	MISDIAGNOSIS OF PRIMARY HIV INFECTION DUE TO FALSE POSITIVE EPSTEIN BARR VIRUS AND CYTOMEGALOVIRUS IGM ASSAYS THREE CASES AND AN EVALUATION OF THE FREQUENCY OF THE PHENOMENON
171	Pundung	Andreas	EFFECTIVENESS CO INFECTION HIV-HEP C TREATMENT BY PEGYLATED INTERFERON AND RIBAVIRIN: MANAGING THE SIDE EFFECT

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172	Samarakoon	Sujatha	PRURITIC PAPULAR ERUPTION AMONG PEOPLE LIVING WITH HIV: A CLINIC BASED STUDY IN SRI LANKA
173	Speicher	David	DETECTION OF HUMAN HERPESVIRUS 8 IN QUEENSLAND AND VICTORIA IN HIV-POSITIVE AND HIV-NEGATIVE PATIENTS
174	Spillane	Heidi	RESULTS OF THE FIRST CMV RETINITIS SCREENING PROGRAM IN GUANGXI PROVINCE CHINA
175	Tatsunami	Shinobu	STATUS OF HEPATITIS C VIRUS INFECTION IN LONG-TERM SURVIVORS AMONG HUMAN IMMUNODEFICIENCY VIRUS-INFECTED JAPANESE PATIENTS WITH COAGULATION DISORDERS
176	Toong	Catherine	LOCALISED MYCOBACTERIUM AVIUM COMPLEX REACTIVATION FOLLOWING SUCCESSFUL ANTIBIOTIC THERAPY AND IMMUNE RESTORATION
177	Varma	Rick	INTERFERON GAMMA RELEASE ASSAYS OR TUBERCULIN SKIN TESTING TO DIAGNOSE LATENT MYCOBACTERIUM TUBERCULOSIS INFECTION IN PATIENTS INFECTED WITH HIV: A SYSTEMATIC REVIEW
178	Watson	Kerrie	USING TECHNOLOGY TO IMPROVE THE MANAGEMENT OF VIRAL HEPATITIS IN HIV INFECTED INDIVIDUALS
179	Whitfeld	Margot	A DISTINCTIVE VIRAL EXANTHEM (ATYPICAL GIANOTTI-CROSTI SYNDROME) IN TWO HIV AND HEPATITIS BE CO-INFECTED MEN.

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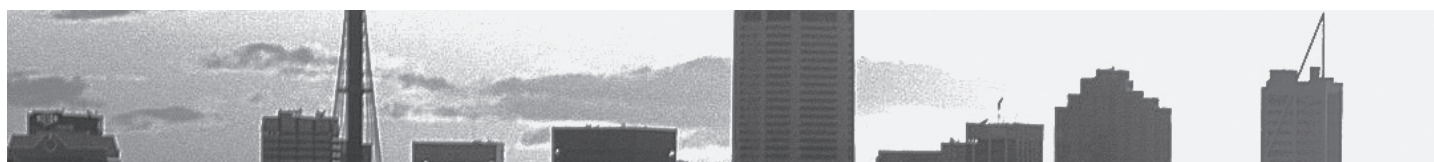




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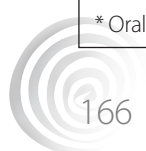
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180	Arya Wiratama	Arman	SUSTAINING THE AVAILABILITY OF PEDIATRIC ARV IN JAKARTA, INDONESIA
181*	Blair	Duncan	EXPEDITING IN-COUNTRY HIV CONFIRMATORY TESTING IN PACIFIC ISLAND COUNTRIES AND TERRITORIES
182	Blyth	Karen	INVESTIGATION OF INTERNATIONAL MODELS OF CARE FOR AGEING INDIVIDUALS WITH HIV INFECTION
183	El-Monir	Karin	SUPPORTED ACCOMMODATION FOR PEOPLE LIVING WITH HIV: FROM A HOME FOR THE DYING TO A PATHWAY BACK TO LIFE
184	Gleeson	Paula	RISKY BEHAVIORS AMONG CAMBODIAN MEN WHO HAVE SEX WITH MEN: HIV/AIDS KNOWLEDGE, ATTITUDES, AND PRACTICES
185	Hutton	Vicki	POSITIVE WITH PETS: THE POSITIVE IMPACT OF PET OWNERSHIP WHEN LIVING WITH HIV
186	Lui	Paraniala	HEALTH CARE WORKER PERCEPTIONS OF BARRIERS PEOPLE FROM VULNERABLE COMMUNITIES EXPERIENCE WHEN ACCESSING SEXUAL HEALTH SERVICES.
187	Marshall	Catherine	DOUBLE TROUBLE
188*	Nguyen	Duc	BUILDING REGIONAL CAPACITY FOR HIV CARE AND TREATMENT THROUGH SHORT COURSE TRAINING, AUSTRALIA
189	Nguyen	Nhu	CLINICAL MENTORING AND CAPACITY BUILDING FOR THE SCALE UP OF METHADONE IN VIETNAM
190	Parunga	Appa	ADOPTING AND IMPLEMENTING PATIENT INFORMATION MANAGEMENT SYSTEMS IN ART SITES IN PAPUA NEW GUINEA
191	Riskiyani	Shanti	THE EMOTIONAL SUPPORT : HOUSEHOLD SUPPORT AND QUALITY LIFE OF PLWH AND TB IN MAKASSAR
192*	Schneider	Karen	ECONOMIC EVALUATION OF MONITORING VIROLOGIC RESPONSES TO ANTIRETROVIRAL THERAPY IN HIV-INFECTED CHILDREN IN RESOURCE-LIMITED SETTINGS
193	Syarif	Omar	INCREASING THE LEADERSHIP OF PEOPLE LIVING WITH HIV IN AIDS RESPONSE IN INDONESIA

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195*	Aitchison	Stacey	ALERTING THE PHYSICIAN: LIPID SCREENING IN A HIV POPULATION
196	Apornpong	Tanakorn	EFFICACY AND SAFETY OF ATV/R 200/100 MG (LOW DOSE)
197	Blair	Duncan	EVALUATION OF A SIMPLE, LOW THROUGHPUT AND LOW COST CD4 T-CELL ENUMERATION PLATFORM
198	Carey	Catherine	A TALE OF FIVE SUBSTUDIES: IN THE STRATEGIC TIMING OF ANTIRETROVIRAL TREATMENT (START) TRIAL
199	Carey	Catherine	EXTENDED SAFETY FOLLOW-UP OF STALWART: A STUDY OF ALDESLEUKIN WITH AND WITHOUT ANTIRETROVIRAL THERAPY
200*	Carey	Dianne	LIPID PROFILES IN HIV-INFECTED ADULTS RECEIVING ATAZANAVIR AND ATAZANAVIR/RITONAVIR IN RANDOMISED TRIALS: SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMISED CONTROLLED DATA
201	Chuah	John	CAN I C U IN 4-6 MTHS ?YES U CAN ! HIV PATHOLOGY COSTS CONTAINMENT BY CD4 STRATIFICATIONS 2008-09 TO 2009-10
202	Jupimai	Thidarat	RESPONSE TO NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITOR (NNRTI)-BASED ANTIRETROVIRAL REGIMENS IN POSTPARTUM WOMEN EXPOSED TO ZIDOVUDINE (AZT) AND SINGLE-DOSE NEVIRAPINE (SDNVP) OR HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART) DURING PREGNANCY FROM MTCT-PLUS PROGRAMS, THAILAND
203	Maher	Joanne	ATTEMPTING SATISFACTION GUARANTEE SURVEYING; PEOPLE LIVING WITH HIV AND THEIR EXPERIENCE IN CLINICAL TRIALS.
204*	McGettigan	Ben	ASSOCIATION BETWEEN LOW 25(OH) VITAMIN D LEVELS, ANTIRETROVIRAL THERAPY AND METABOLIC PROFILE IN A COHORT OF TREATED AND THERAPY NAÏVE HIV POSITIVE PATIENTS IN WESTERN AUSTRALIA
205	Oyomopito	Rebecca	FREQUENCY OF SITE-REPORTED VIRAL LOAD MONITORING PREDICTS HIV DISEASE PROGRESSION FOLLOWING HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART).

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206	Pett	Sarah	IMPACT OF ANTIRETROVIRAL CLASS ON CD4+ T-CELL CHANGES AND CLINICAL OUTCOMES IN ESPRIT (EVALUATION OF PROLEUKIN® IN AN INTERNATIONAL TRIAL).
207*	Pett	Sarah	CONSIDERATIONS IN THE RATIONALE, DESIGN AND METHODS OF THE STRATEGIC TIMING OF ANTIRETROVIRAL TREATMENT (START) TRIAL
208*	Puls	Rebekah	TWO PATTERNS OF CEREBRAL METABOLITE ABNORMALITIES ARE DETECTED ON PROTON MAGNETIC RESONANCE SPECTROSCOPY IN HIV+ SUBJECTS ELECTIVELY COMMENCING ART
209*	Richards	Deborah	CLINICAL AUDIT OF PHYSICIAN ADHERENCE TO NATIONAL GUIDELINE RECOMMENDATIONS FOR CARDIOVASCULAR DISEASE (CVD) AND RENAL DISEASE SCREENING AND RISK FACTOR MANAGEMENT.
210	Shapira	Deborah	A POSSIBLE SOLUTION FOR ENSURING ACCURATE CD4 ENUMERATION IN PNG, THE PACIFIC AND S.E. ASIA
211	Spillane	Heidi	PAEDIATRIC OUTCOMES OF A 6-YEAR HIV PROJECT IN NANNING, GUANGXI PROVINCE, CHINA
212	Spillane	Heidi	OUTCOMES OF A 6-YEAR HIV TREATMENT AND CARE PROJECT IN GUANGXI PROVINCE, CHINA
213	Taing	Kuong	CASE REPORT: A VERY UNUSUAL HIV CASE
214	Tomlins	Louise	SEASONAL DIFFERENCES IN VITAMIN D LEVELS IN AN HIV POSITIVE COHORT
215	Triyono	Erwin	SERUM IMUNOGLOBULIN E (IgE) LEVEL IN HIV / AIDS PATIENT WITH VARIOUS IMMUNE LEVEL
216	Triyono	Erwin	PREDICTORS OF MORTALITY IN HOSPITALIZED AIDS PATIENTS
217	Varma	Rick	PHARMACOGENOMICS AND INDIVIDUALISING ANTIMVIRAL THERAPY: ATRIPLA® DOES NOT MEAN THREE TIMES PER DAY!

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219	Ang	Francis	BREAKING DOWN BARRIERS: AN STI/AIDS PREVENTION PROGRAMME IN SECONDARY SCHOOLS IN SINGAPORE
220	Ardiansyah	Ari	COMMUNITY BASED APPROACH FOR PLHIV AND IDU IN BANCEUY PRISON BANDUNG
221*	Burke	Jean	INFANT FEEDING NETWORKS AND HIV PREVENTION IN EAST AFRICA
222	Carmody	David	ARE WE DOING ENOUGH? A SURVEY OF HIV POSITIVE PATIENTS' SMOKING BEHAVIOURS
223	Chow	Eric Pui Fung	THE COMING ERA OF HIV/AIDS IN CHINA: RAPID TRANSMISSION OF HIV AMONG MEN WHO HAVE SEX WITH MEN
224	Dao	Vinh	INITIATION OF COUPLES HIV COUNSELING AND TESTING (CHCT) INTERVENTION IN VIETNAM
225	Dolan	Kate	HIV AND HCV SEROINCIDENCE AMONG FEMALE DRUG USERS IN TEHRAN, IRAN.
226	Down	Ian	CURRENT RISK FACTORS FOR HIV SEROCONVERSION AMONG GAY MEN
227*	El-Hayek	Carol	DOES USING A BED CAPTURE ENZYME IMMUNOASSAY TEST ENHANCE CURRENT HIV SURVEILLANCE PRACTICES?
228	El-Hayek	Carol	NEARLY 30 YEARS OF SURVIVAL FOLLOWING HIV DIAGNOSIS: FINDINGS FROM VICTORIA, AUSTRALIA
229	Ivory	Kimberley	MAKING HETEROSEXISM VISIBLE: AN ESSENTIAL FIRST STEP IN HIV PREVENTION
230	Kaupa	Alice	THE ROLE OF THE EDUCATION SECTOR IN PNGs HIV/AIDS RESPONSE
231	Kerr	Stephen	NO DOSE ADJUSTMENT NECESSARY FOR STANDARD DOSE GENERIC LOPINAVIR/RITONAVIR IN THAI HIV-1 INFECTED WOMEN DURING THE THIRD TRIMESTER OF PREGNANCY
232	Kosasih	Robert	THE IMPACT OF METHADONE MAINTENANCE PROGRAM ON THE NUMBER OF NEEDLE SYRINGES DISTRIBUTED IN DKI JAKARTA, 2009
233	Kualawi	Melvin	VISUAL NARRATIVES AS HIV AND AIDS PREVENTION STRATEGY IN THE HIGHLANDS OF PAPUA NEW GUINEA
234	Kwon	Amy	THE IMPACT OF NEEDLE SYRINGE PROGRAMS ON HIV RISK BEHAVIORS AMONG IDUS IN JAKARTA, INDONESIA

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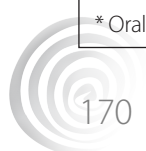
235	Lemoh	Chris	TABULA NEGRA: UNDERSTANDING OF HIV WITHIN VICTORIA'S AFRICAN COMMUNITIES
236	Matheson	Angela	CREATING DIALOGUE, ADDRESSING RISK: A COMMUNITY-BASED PREVENTION CAMPAIGN TARGETING GAY MEN WHO INJECT
237*	McDonald	Ann	USE OF THE BED ASSAY FOR DESCRIBING TRENDS IN INCIDENT HIV INFECTION IN SYDNEY, 2005 - 2009
238	Merati	Tuti	ROLE OF PROVINCE CARE SUPPORT TREATMENT WORKING GROUP AND EXPANSION OF CARE SUPPORT AND TREATMENT SERVICES IN BALI
239	Morgan	Debbie	GENITAL ALTERATION, HIV AND SEXUALLY TRANSMITTED INFECTION RISK REDUCTION IN PNG
240	Mortimer	Elissa	REVIEW OF THE NON-OCCUPATIONAL POST EXPOSURE PROPHYLAXIS (NPEP) MANAGEMENT SYSTEM IN SOUTH AUSTRALIA.
241*	Murray	John	AGEING AND CURRENT ANTIRETROVIRAL LEVELS ARE INSUFFICIENT TO REDUCE THE NUMBER OF PEOPLE LIVING WITH HIV IN AUSTRALIA FOR THE FORESEEABLE FUTURE
242	Opio	Frederick Moses	USING A COMMUNITY APPROACH TO ADDRESS SEXUAL GENDER BASED VIOLENCE IN NORTHERN UGANDA
243	Paquette	Dana	A RESPONDENT-DRIVEN SAMPLING (RDS) SURVEY OF PEOPLE WHO INJECT DRUGS: AN ASSESSMENT OF RDS ASSUMPTIONS AND REQUIREMENTS
244*	Pedrana	Alisa	SEXUAL RISK BEHAVIOUR AND KNOWLEDGE OF HIV STATUS AMONG A SAMPLE OF GAY MEN IN AUSTRALIA.
245	Perri	Vic	HIV PEER SUPPORT IN THE QUIT FRESH START COURSE PROVIDES A POSITIVE INFLUENCE IN ASSISTING SMOKING CESSATION.
246	Phalkun	Mun	HIV PREVALENCE AND RISK BEHAVIORS AMONG DRUG USER IN CAMBODIA 2007
247*	Pierce	Anna	NPEP PATIENTS TESTING POSITIVE FOR HIV AT BASELINE VISIT AND DURING FOLLOW UP PERIOD
248	Poolsawat	Monsicha	RESULTS OF AN HIV PREVENTION OUTREACH PROGRAM FOR DORMITORY STUDENTS IN A NORTHERN THAI PROVINCE, 2005-2009
249	Prestage	Garrett	REASONING RISK-REDUCTION
250	Risenga	Rebecca	PERCEPTIONS OF VCT COUNSELLORS WITH REGARDS TO VCT USE BY YOUNG ADULTS IN VHEMBE DISTRICT, LIMPOPO PROVINCE
251*	Ryan	Claire	MOLECULAR ANALYSIS OF HIV-1 SUBTYPE C IN PAPUA NEW GUINEA

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252	Saxton	Peter	TRENDS IN HIV PREVALENCE AMONG HOMOSEXUAL MEN IN NEW ZEALAND 1985-2009
253	Sulgodu Ramachandra	Srikrishna	CREATING A STRONGER EVIDENCE BASE FOR PROGRAM PLANNING AND IMPLEMENTATION: HIV/AIDS DATA TRIANGULATION IN ANDHRA PRADESH, INDIA
254	Su	Chunyan	RESEARCH ON THE DOCTOR-PATIENT ROLE IN CASES OF HIV HYPOCHONDRIASIS
255	Syphanh	Ratsamy	USING THE MOBILE HEALTH AND NUTRITION PROMOTION EVENT TO SCREEN BEHAVIORAL RISKS FOR SEXUALLY TRANSMITTED INFECTIONS AND HIV IN THE RURAL COMMUNITIES OF CHAMPASAK PROVINCE, LAO PDR
256	Triyono	Erwin	PROFILE OF LYMPHOCYTE T CD4 COUNT IN STAGE I OF HIV & AIDS PATIENTS
257	Triyono	Erwin	PREVALENCE OF TUBERCULOSIS IN HIV & AIDS INFECTION
258	Triyono	Erwin	PROFILE OF OPPORTUNISTIC INFECTION IN HIV & AIDS PATIENTS
259	Tuiketei	Timaima Bakani	DISSERTATION ON THE RESEARCH: WHAT IS DRIVING THE HIV EPIDEMIC IN FIJI
260	Tynan	Anna	A TYPOLOGY OF PENILE CUTTING IN PAPUA NEW GUINEA: RESULTS OF A MODIFIED DELPHI STUDY AMONG SEXUAL HEALTH CLINICIANS
261	Vallely	Andrew	VAGINAL MICROBICIDE ACCEPTABILITY IN PAPUA NEW GUINEA: RESULTS OF A QUALITATIVE STUDY AMONG WOMEN AND MEN ATTENDING A SEXUAL HEALTH CLINIC IN PORT MORESBY
262*	Vallely	Andrew	A LONGITUDINAL CLINICAL PILOT STUDY AMONG MEN AND WOMEN ATTENDING A SEXUAL HEALTH CLINIC IN MT HAGEN, PAPUA NEW GUINEA
263	Vermeeren	David	STRATEGIES TO REDUCE RATES OF NEW HIV DIAGNOSES AMONG GAY MEN AND OTHER MSM IN SOUTH AUSTRALIA
264	Wulandari	Luh Putu Lila	CONDOM USE AMONG FEMALE SEX WORKERS IN INDONESIA: A LITERATURE REVIEW AND RECOMMENDATION FOR FUTURE RESEARCH
265	Zein	Rahma	HIV/AIDS PREVENTION EDUCATION IN INDONESIA: IS THE NATIONAL POLICY REACHING SCHOOLS AT THE LOCAL LEVEL?
266*	Zhang	Lei	CHINESE INVESTMENT IN NEEDLE AND SYRINGE PROGRAMS YIELD SUBSTANTIAL HEALTH AND FINANCIAL RETURN
267*	Zou	Huachun	SHOULD INTERNET AND VOLUNTARY COUNSELING AND TESTING FACILITATED ACTIVE HIV TESTING SERVICES FOR MEN WHO HAVE SEX WITH MEN BE SCALED UP IN CHINA?

* Oral Poster



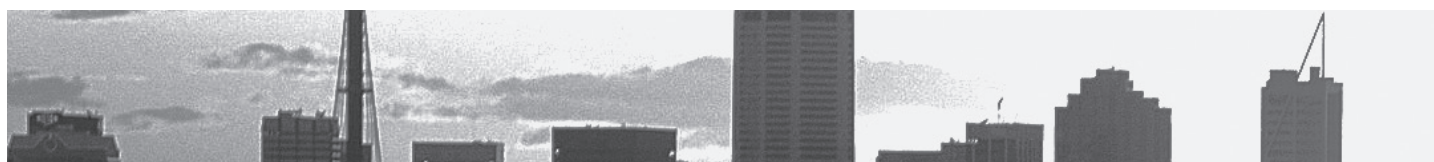


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269	Banjade/shahi	Sita	PLEDGE FROM BURDEN
270	Burdon	Rachel	IDU IN VIETNAM EXPERIENCE GOOD CLINICAL AND IMMUNOLOGICAL OUTCOMES ON ART
271	Chowdhury	Habiba	THE PAUCITY IN HIV/AIDS PREVENTION, CARE AND SUPPORT AND TREATMENT SERVICE REGIMEN TO ENCOMPASS THE VULNERABILITY OF PEOPLE WITH DISABILITY
272	Fu	Xiaoxing	MARKET ECONOMY AND SPATIAL TRANSFORMATION IN CHINESE GAY MEN'S LIFE
273	Gray	Richard	IMPACT OF REDUCTIONS IN ANTIRETROVIRAL THERAPY AVAILABILITY ON THE HIV EPIDEMIC IN PAPUA NEW GUINEA
274*	Grimwood	Ashraf	AN EVALUATION OF THE IMPACT OF A COMMUNITY BASED ADHERENCE SUPPORT PROGRAMME ON ART OUTCOMES IN SELECTED GOVERNMENT HIV TREATMENT SITES IN SOUTH AFRICA
275	Hamid	Aty	RELIGION AND SELF STIGMA AMONG PLWHA IN MAKASSAR. INDONESIA
276*	Hazarika	Indrajit	RISK FACTORS FOR HIV-1 INFECTION IN INDIA: EVIDENCE FROM THE NATIONAL FAMILY HEALTH SURVEY 3
277	Hosseinzadeh	Hassan	FUNCTIONAL ANALYSIS OF HIV/AIDS STIGMA: CONSENSUS OR DIVERGENCE?
278	Idrus	Nurul Ilmi	DOUBLE SIDED: VULNERABILITY OF LESBIAN SEX WORKERS TO HIV/AIDS IN MAKASSAR, SOUTH SULAWESI, INDONESIA
279	Jackson	Eleanor	MOBILISING COMMUNITIES FOR SEXUAL HEALTH IMPROVEMENT IN EAST NEW BRITAIN, PNG.
280	Kaitani	Miliakere	THE COMMERCIAL SEXUAL EXPLOITATION OF CHILDREN IN FIJI
281	Kaitani	Miliakere	HIV AND SOLDIERS ON OVERSEAS PEACEKEEPING MISSION: A FOCUS ON THE FIJI MILITARY FORCE
282	Kasana	Dimple	HIV AIDS IN INDIA-SITUATION ANALYSIS AND ROAD AHEAD

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283	Kumbu	Joe	OUTCOME OF HIV EXPOSED AND INFECTED CHILDREN AT A RESOURCE LIMITED SETTING (RLS); PORT MORESBY GENERAL HOSPITAL (PMGH), PAPUA NEW GUINEA (PNG) THREE YEARS AFTER ANTI-RETROVIRAL THERAPY (ART) WAS INTRODUCED.
284	Lui	Paraniala	SOLOMON ISLANDS COLLEGE OF HIGHER EDUCATIONS POLICY AND CURRICULUM RESPONSE TO HIV AND AIDS PANDEMIC.
285	Man	Wing Young Nicola	FACTORS ASSOCIATED WITH CONSISTENT CONDOM USE WITH CLIENTS AMONGST FEMALE SEX WORKERS IN SIEM REAP, CAMBODIA
286	Manyullei	Syamsuar	UNDERSTANDING GOOD ENOUGH?:HIV/AIDS RISK BEHAVIORS AMONG MEN WHO HAVE SEX WITH MEN IN MAKASSAR, SOUTH SULAWESI, INDONESIA
287	McPherson	Michelle	HIV PATTERNS AMONG CULTURALLY AND LINGUISTICALLY DIVERSE POPULATIONS IN NSW, 2000-2008
288	Moala	Edward	LEGISLATION AND THE ENABLING ENVIRONMENT FOR PACIFIC MEN WHO HAVE SEX WITH MEN AND TRANSGENDER.
289*	Morrison	Ele	HARM REDUCTION IN AN IDEAL WORLD: USERS PERSPECTIVE
290	Okazaki	Takayuki	PREVENTION OF MTCT HIV IN JAPAN 'A PRESENT SITUATION AND NEXT AIM'
291	Pervaiz	Ather	RESPONDENT DRIVEN SAMPLING IMPLEMENTATION IN PAKISTAN AMONG MIGRANT WORKERS: LESSONS LEARNED FROM THE FIELD
292*	Purwani	Sri	CREATING ACCESSIBLE SERVICES FOR IDUS AT COMMUNITY CLINICS IN EAST JAVA
293	Qasim	Muhammad	CHILDHOOD SEXUAL ABUSEAS ARISK FACTOR FOR DEPRESSION IN WOMEN:PSYCHOSOCIAL AND NEUROBIOLOGICAL CORRELATES.
294	Renkin	Lisa	STRENGTHENING THE HEALTH SYSTEM WHERE THERE IS LOW HIV PREVALENCE - HAS THE PROBLEM PROVIDED AN OPPORTUNITY?
295*	Riskiyani	Shanti	HOUSEHOLD SUPPORT AND QUALITY LIFE OF PEOPLE LIVING WITH HIV AND TB
296	Rokoduru	Avelina	PACIFIC YOUTH AND HIV: A COMPARATIVE STUDY OF FIJI, KIRIBATI AND SOLOMON ISLAND YOUTHS
297	Roy	Katy	HIV SUPPORTED ACCOMMODATION: THE CENTRALISED INTAKE MODEL.

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298	Ryan	Claire	THE DIRECTION OF HIV AND STI BIOLOGICAL RESEARCH AT THE PAPUA NEW GUINEA INSTITUTE OF MEDICAL RESEARCH
299	Saktiawati	A. Morita	CONDOM USE AMONG WOMEN WHO INJECT DRUGS IN CENTRAL JAVA, INDONESIA
300	Seniloli	Kesaia	THE HIV SECOND GENERATION SURVEILLANCE SURVEY: A METHODOLOGICAL DISASTER
301	Silwana	Sani	SOCIAL NETWORK AND HIV/AIDS TRANSMISSION: THE CASE IN GUNUNG SARI PRISON, MAKASSAR, SOUTH SULAWESI, INDONESIA.
302	Spillane	Heidi	COMPARISON OF EARLY AND LATE PRESENTERS AMONG HIV-POSITIVE ADULTS ATTENDING CDC/MSF HIV CLINIC, IN NANNING, CHINA
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* Oral Poster



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**POSTER
ABSTRACTS**

THEME A: UNDERSTANDING AND IDENTIFYING HIV: BASIC SCIENCE, BIOLOGY AND PATHOGENESIS

In order to infect non-dividing cells the HIV-1 pre-integration complex (PIC) must first pass through the plasma membrane before travelling through the cytoplasm to reach the nucleus. This is followed by import into the nucleus through the nuclear pore complex. To transverse the cytoplasm the HIV-1 PIC binds to the microtubule-based motor complex, dynein. Dynein delivers cargo, including other viruses, in a retrograde direction. It is thought that one or more of the dynein cargo-binding subunits bind directly to viral proteins such as Vpr, matrix (MA), integrase (IN) or capsid (CA) facilitating transport to the nucleus.

A number of in vitro pulldown and yeast two-hybrid assays were used to identify the binding sites between the PIC proteins and dynein subunits. These assays revealed that the PIC proteins Vpr and IN bound to both dynein subunits DYNLT3 and DYNLL, while only IN bound to DYNLT1. No binding was found to MA or CA. To define the minimal dynein-binding domains, IN and Vpr were fragmented into a series of N- and C-terminal truncations which included just the central IN catalytic domain. Based on the results of these mapping studies, we will over-express dominant/negative fragments of IN and Vpr in a live cell system before infecting with immunofluorescent HIV-1. This will allow us to assess the biological relevance of the identified HIV/dynein interactions.

The binding of viral proteins to dynein has been found to facilitate the retrograde transport of viruses. This study identifies binding between HIV-1 PIC proteins Vpr and IN with the cargo-binding dynein subunits DYNLT1, DYNLT3 and DYNLL. It may be that these interactions act in a redundant fashion to transport the PIC along microtubules. Furthermore, studies on the dynein subunit DYNLL have proposed a role in nuclear import of human foamy virus, which may constitute a similar mechanism in HIV-1.

POSTER NUMBER:
PAPER NUMBER: 355

**THE HIV-1 PRE-INTEGRATION
COMPLEX PROTEINS VPR AND
IN INTERACT WITH THE CARGO
-BINDING SUBUNITS OF THE
MICROTUBULE-BASED MOTOR
DYNEIN**

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THEME A: UNDERSTANDING AND IDENTIFYING HIV: BASIC SCIENCE, BIOLOGY AND PATHOGENESIS

POSTER NUMBER:
PAPER NUMBER: 87

**PLASMA CHEMOKINE LEVELS
CCL5, CXCL10, ARE ALTERED IN
MALAYSIAN HIV PATIENTS ON
HIGHLY ACTIVE ANTIRETROVIRAL
THERAPY**

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Several chemokine receptors play the role of HIV coreceptors, in particular CCR5, CCR2, and CX3CR1. Clinical studies demonstrate that sensitivity to HIV-1 infection and progression toward AIDS are associated with chemokines (CXCL12 and CCL5). Few studies have assessed plasma chemokine levels during antiretroviral therapy (ART). Serum CCL5 levels have been positively and inversely linked with disease progression.

Chemokines are also implicated in HIV-associated neurological disease such as Sensory Neuropathy (SN), a common and disabling disease in HIV patients. CCL2 is upregulated in DRG in the spinal stenosis model of neuropathic pain. RANTES stimulate tactile allodynia in rodent models. CXCR4 and CXCL12 are associated with neuron damage. However links between chemokine plasma levels in vivo and SN have not been investigated.

We investigated links between ART, plasma chemokine levels (CCL2, CCL5, CX3CL1, CXCL12, CXCL10) and genotype in a longitudinal study of patients with HIV from Kuala Lumpur, Malaysia (n=98). Plasma was available from 69 patients at baseline, 6, 12, 24 and 48 weeks.

Plasma CCL5 levels in patients increased during ART at week 6 (p=0.007), 12 (p=0.002), 24 (p=0.003) and 48 (p=0.005) compared to baseline. At baseline CCL5 levels are lower in patients than non-HIV controls, but at week 12 patient CCL5 were significantly higher than controls. This trend continued over weeks 24 (p=0.09) and 48 (p=0.09). Conversely, plasma CXCL10 levels decreased at weeks 12 (p=0.04), 24 (p=0.02) and 48 (p=0.009) compared to baseline. Patient CXCL10 levels were higher than non HIV controls throughout.

CCL2 and CCL5 genotypes and current CD4 T-cell counts were not associated with plasma chemokine levels, but nadir CD4 T-cell counts were inversely correlated with CXCL10 and CX3CL1 levels at week 12 (p=0.03, p=0.04 respectively).

Associations between chemokines and neuropathy were investigated in 32 patients screened using the ACTG BPNS tool. Patients with neuropathy (n=8) displayed slightly higher CCL5 levels throughout therapy when compared to patients without neuropathy (n=22). Chemokine genotype was not associated with SN.

Our findings highlight the importance of relationship between chemokines and treatment response in the pathogenesis of HIV disease and neuropathy.



THEME A: UNDERSTANDING AND IDENTIFYING HIV: BASIC SCIENCE, BIOLOGY AND PATHOGENESIS

Understanding natural immunological control of HIV infection will increase knowledge about 'protective' immune responses against HIV antigens and facilitate the development of HIV vaccines. Antibody responses to the Gag-encoded antigen p24 have been associated with slower progression of HIV infection but the role of antibodies in natural control of HIV infection is poorly understood. We have therefore assayed plasma levels of IgG1 and IgG2 antibodies to HIV p24 in HIV controllers and both ART-naïve and -treated patients who had experienced severe immunodeficiency. Plasma samples from HIV controllers (n=10) and patients with a nadir CD4⁺ T cell count of <100/ μ L and/or previous AIDS who were ART-naïve (n=8) or -treated (n=10) were assayed for IgG1 and IgG2 antibodies to HIV proteins using Western blot assays. Antibody levels were expressed as a score from 0-5 based on visual inspection of band density. Both IgG1 and IgG2 antibodies to HIV p24 were higher in controllers than in patients who had experienced severe immunodeficiency (p=0.004 and 0.003, respectively). In contrast, neither IgG1 nor IgG2 antibodies to HIV gp41 differed between these two groups of patients. IgG antibodies to HIV p24 may play a role in the control of HIV infection and most advantage may be gained from an antibody response that has 'switched' to IgG2 antibody production.

POSTER NUMBER:
PAPER NUMBER: 617

NATURAL CONTROL OF HIV INFECTION IS ASSOCIATED WITH IgG1 AND IgG2 ANTIBODIES TO HIV p24

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Cytomegalovirus (CMV) has long been neglected as an important pathogen in progression of HIV towards AIDS. In the late 1980's it was proposed that CMV is the driving force in HIV pathogenesis and disease progression. In India seroprevalence of CMV is estimated to be 99 % in healthy population. However, its excretion in seminal fluid has not been studied in Indian AIDS patients so far. The study cohort consisted of 55 HIV seropositive male patients having CD4 count >250. All were tested HIV positive for first time. The average age of the cohort was 32.25 years (range 21-52). After counselling and written consent, blood and semen specimen were collected and processed as per the standard laboratory protocol. The samples were tested for CMV serology status by ELISA and then processed for DNA quantification in both the samples by Real Time PCR targeting UL83 region of the gene, which is responsible for pp65 antigen translation. All patients were found to be CMV seropositive by ELISA. There was a significant difference (P <.0001) in the levels of CMV DNA in blood plasma (22%) and seminal plasma (63 %). However there was no significant difference (P =0.09) in the detection level of the CMV DNA levels between the seminal plasma (63%) and semen pellet (68%). Conclusion: High quantities of CMV are excreted in the semen of HIV infected patients, when the virus is undetectable.

POSTER NUMBER:
PAPER NUMBER: 126

CYTOMEGALOVIRUS SHEDDING IN HIV INFECTED PATIENTS IS SIGNIFICANTLY HIGHER IN SEMEN THAN BLOOD PLASMA.

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THEME A: UNDERSTANDING AND IDENTIFYING HIV: BASIC SCIENCE, BIOLOGY AND PATHOGENESIS

POSTER NUMBER:
PAPER NUMBER: 458

**VACCINATION-INDUCED
NONCYTOLYTIC EFFECTS IN
THE ACUTE PHASE OF SHIV
INFECTION**

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CD8+ T cells play an essential role in control of human and simian immunodeficiency virus infections, and a number of studies have shown that vaccines that induce CD8+ T cell responses can reduce viral loads and preserve CD4+ T cell numbers in monkey models of HIV infection. The mechanism of this viral control by these vaccine-induced CD8+ T cells is usually assumed to be cytolysis of infected cells. However, in addition to cytolysis of infected cells, CD8+ T cells secrete a range of soluble factors that suppress viral replication. We have studied the dynamics of virus and CD4+ T cells in a successful vaccination-challenge model of SHIV infection. Intuitively, we expect that if vaccine-induced CD8+ T cells kill SHIV infected cells, then better viral control should be associated with more rapid viral decay after the peak. However, we find that better viral control is associated with slower decay of peak viral load. Comparing viral and CD4+ T cell dynamics in acute infection, we find that a cytolytic mode of viral control with direct killing of infected cells is inconsistent with the data. However, analysis of the predicted effects of noncytolytic CD8+ effector function with the experimental data suggests that non-cytolytic control provides a better explanation of the observed results. This suggests that vaccine-induced CD8+ T cells control SHIV infection by non-cytolytic means.

POSTER NUMBER:
PAPER NUMBER: 700

**ROLE OF TAT IN INCREASED HIV-
1 SPREAD AND INFECTION, A
STRUCTURAL MODEL**

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The HIV-1 tat protein is a small protein with 86-101 amino acids, which is important for regulating productive virus replication. Retrospective analysis of serial serum samples has shown an inverse relationship between the presence of natural anti-tat antibody levels and the rate of progression towards AIDS. Recently, it has been reported that tat increases the rate of virus infection and spread in cell culture experiments. Although the mechanism of action is unclear, this observation is dependent on the interaction between tat and gp120, the surface-exposed subunit of the spike glycoprotein trimer presented on the virus surface.

To understand the mode of action, cryo-electron microscopy (cryoEM) was employed to study the complex composed of tat and Env trimer gp140. We preserved the samples by plunge-freezing in super cooled liquid ethane to prevent the formation of crystalline ice and avoid undesirable conformational damages. In addition, a model of the tat-gp140 trimer complex was generated by Modeller8 program and optimized through energy minimization with AMBER8 force field and fitting by the constraint of cryoEM density maps.

CryoEM density map of tat-conjugated gp140 showed distinct features from that of the native spike glycoprotein trimer. As a result of interacting with tat, structural rearrangements of gp120 subunit and the spike glycoprotein trimer could be observed. These structural changes involve partial extension from its initial alpha-helical structure and exposure of V3 loop in gp120 which was previously buried and not accessible for interaction with co-receptors in the native spike glycoprotein structure. This suggested that the conformational changes as a result of tat-interaction were similar to those observed in CD4m-induced conformational changes. In addition, we could determine the site of interaction between gp120 and tat by the extra density absent in the native spike glycoprotein trimer.

Our data demonstrated a possible structural model for tat-induced virus infection and spread. Because the CD4 interaction site in gp120 subunit remains unhindered after tat-interaction the information obtained from this model provides us with a platform for the design of future studies.

THEME A: UNDERSTANDING AND IDENTIFYING HIV: BASIC SCIENCE, BIOLOGY AND PATHOGENESIS

The Human Leukocyte antigen class I (HLA-I) molecules are an important determinant of HIV disease progression. They present pathogen-derived peptides on surface of the infected cells for recognition by CD8+ T cells. CD8+ T cells are thought to be playing a crucial role in the control of virus in the acute HIV infection. Perhaps to evade this immune response, HIV has evolved a mechanism through which Nef, an early HIV encoded protein downregulates HLA-I expression. This process is mediated by Nef interacting with motifs in the cytoplasmic domain of HLA-I. Extreme polymorphism in the HLA region suggests that the cytoplasmic domain of HLA-A, B and C cannot be conserved. However, no attempts have been made so far to study the polymorphism of cytoplasmic domain of HLA-I or their correlation with the downregulation induced by HIV infection and effect on CD8 mediated T cell response.

To address this issue, we firstly searched for the polymorphisms in the cytoplasmic region of HLA-I from all available HLA-A, B, and C alleles and identified a total of 17 isoforms with either 1 or 2 more point mutations. We then generated individual cell lines, each expressing chimeric molecules that contain unique cytoplasmic domains corresponding to HLA-I isoforms and looked for downregulation in the context of Nef (SF2) or HIV-1 IIIB infection. We found that Nef mediated HLA-I downregulation was dependant on HLA-I allele cytoplasmic isoform. Invitro viral suppression assays demonstrated that the alleles that resisted downregulation have the ability to control viral replication more efficiently. Furthermore, we noted that HLA-C surface expression was much lower than A or B.

Our findings indicate that cytoplasmic isoform plays a key role in downregulation of HLA-I and viral control. We also propose that cytoplasmic domain of HLA-C plays an important role in lower expression of HLA-C on the surface.

HIV epidemiological and clinical studies alongside SIV animal models have provided us with the current model for HIV transmission. Key to HIV pathogenesis is the ability to infect through cell-cell contact, observed in structures termed filopodia or viral cytonemes and viral synapses. These structures are hypothesised to facilitate HIV spread for co-ordinating local concentration of virus and viral receptors to the cell-to-cell interface. Whilst studies have solely focused on CD4+ T cell-T cell spread, viral spread between infected CD4+ T cells and uninfected DCs and the mechanisms that facilitate it has yet to be characterized.

This study presents data that investigated the consequences of exposing infected CD4+ T cells to immature DCs. Initially, the use of resting CD4 + T cells to attempt to mimic viral cell-cell transfer in vitro in an atraumatic model proved elusive. In contrast to in vivo observations with mucosal CD4+ T cells, resting peripheral blood CD4+ T cells were resistant to HIV-R5 infection but also the broader-tropic Vesicular Stomatitis Virus glycoprotein (VSVg) pseudotyped R5 HIV-1. Thus to render cells permissive to HIV-1 infection, optimal T cell activation strategies were evaluated to establish the conditions for optimal levels of infection. From initial observations of resting CD4+ T cells and comparative observations with activated CD4+ T cells, it was evident levels of HIV infection is closely tied to CD4+ activation status, permitting significant levels of HIV infection at low MOI.

More significantly, complimentary fluorescent and flow cytometric assays observed in infected activated CD4+ T cells were able to contact, efficiently transfer HIV-1 and establish immature DC infection at a greater extent compared to limited cell-free DC infection. Fluorescent imaging technologies involving a panel of fluorescent viruses were employed to capture both fixed and live viral transfer events. One such observation was conjugates characteristic of viral synapses. As previous studies have observed infected DCs to transfer significant levels of virus to CD4+ T cells, there is real potential for infected DCs to synergize with future uninfected CD4+ T cell populations to accelerate viral production and spread in the host.

POSTER NUMBER:
PAPER NUMBER: 663

**THE ROLE OF POLYMORPHIC
CYTOPLASMIC DOMAIN OF HLA
CLASS I IN HIV-NEF MEDIATED
PATHOGENESIS**

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POSTER NUMBER:
PAPER NUMBER: 145

**CHARACTERISATION OF THE
VIRAL SPREAD BETWEEN HUMAN
IMMUNODEFICIENCY VIRUS (HIV)
INFECTED CD4+ T-CELLS AND
UNINFECTED DENDRITIC CELLS
(DCs)**

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THEME A: UNDERSTANDING AND IDENTIFYING HIV: BASIC SCIENCE, BIOLOGY AND PATHOGENESIS

POSTER NUMBER:
PAPER NUMBER: 189

**INDUCTION OF TNFA AND IL-12
VIA TLR2 CAN EXPLAIN SOME
CASES OF TB IRD**

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Tuberculosis (TB)-associated immune restoration disease (IRD) has been associated with the restoration of mycobacterium specific IFN γ responses after ART. Recognition of mycobacterium associated molecular patterns through Toll-like receptors (TLR) on dendritic cells (DC) and monocyte results in pro-inflammatory cytokine production (e.g. TNF α and IL-12). Antigen-specific CD4⁺ T-cells are then activated during antigen presentation by DC and/or monocyte, promoting effective adaptive immune responses. Here, we investigate the role of TLR2 in TB IRD.

PBMC were collected at week 0, 6, 12, 24 and 48 from Chinese male patients from Kuala Lumpur, Malaysia (n=15) who initiated ART with <200 CD4⁺ T-cells/ml. Six experienced TB IRD. 15 Chinese male healthy controls were included. PBMC producing IFN γ were quantified by ELISpot after stimulation with PPD. Cell subsets and TLR2 expression were measured by flow cytometry. PBMC were cultured overnight with mycobacterium-derived lipomannan (TLR2 agonist) and supernatants were harvested to measure TNF α , IL-12p40 and IL-10 by ELISA.

All patients have higher TLR2 expression on myeloid DC (MDC) than controls ($p < 0.005$). This decreased by week 24 ($p = 0.038$) to normal levels. TLR2 expression on monocytes was higher in patients at baseline ($p = 0.0001$) and stayed higher at week 24 than controls ($p = 0.021$). At Week 24, TLR2 expression on monocytes and TNF α production on IRD patients was higher than non-IRD patients ($p = 0.005$ and 0.05 respectively). Longitudinal plots showed 3 TB IRD patients with high TLR2 expression on mDC and monocytes had dramatic increase in LM-specific TNF α and IL-12 production whilst their IL-10 responses remained low. TNF α production correlated with TLR2 expression on MDC ($r = 0.667$, $p = 0.018$) and monocytes ($r = 0.705$, $p = 0.01$) at week 24. Levels of IL-10 levels were inversely related to TNF α , peaking in the patient with lowest T-cell activation.

High TLR2 expression on both MDC and monocytes followed by high TNF α and IL-12p40 production without parallel increases in IL-10 in response to mycobacterium-derived TLR2 ligands suggests a mechanism for the induction of IRD. Future studies should address cytokine responses mediated via TLR.

POSTER NUMBER:
PAPER NUMBER: 561

**INVESTIGATING THE IMPACT
OF APOBEC3F ON EARLY HIV-1
REPLICATION**

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The success of antiretroviral therapies for treating HIV-1 is hindered by the emergence of drug resistance. Investigations of intrinsic host cell defences may yield novel therapeutic strategies/targets to combat HIV-1. Cellular Apolipoprotein B mRNA-editing catalytic polypeptide-like 3 (APOBEC3) proteins are DNA cytidine deaminases that package into assembling virions in virus-producing cells and restrict HIV-1 replication in target cells. However, their precise mechanism of action remains unclear. The prototypic family members, APOBEC3G (A3G) and APOBEC3F (A3F), hypermutate reverse-transcribing viral cDNA and perturb gene expression. Separate studies, however, show A3G/3F also cause earlier blocks in viral replication, including a profound decline in viral cDNA in the nucleus. We hypothesise that A3G/3F perturb HIV-1 cDNA trafficking to/into the nucleus to deplete nuclear viral cDNA as an integral part of their restriction mechanism.

To test our hypothesis, the impact of A3F on the early intracellular trafficking of HIV is under examination. To this end, fluorescently labeled HIV-1 containing or lacking A3F and high resolution, DeltaVision fluorescent microscopy with deconvolution is being utilized. HIV-1 was titrated with increasing A3F plasmid to determine an A3F amount that restricted HIV-1. Of note, A3F was less potent at restricting HIV-1 relative to the equivalent level of A3G plasmid, consistent with the literature. While complete HIV-1 restriction was not achieved in the titrations, an A3F amount partially restricting HIV-1 infection was selected. VSVg-pseudotyped HIV-1 was subsequently generated with or without this A3F amount, plus the GFPVpr and S15mCherry fluorescent labels. GFPVpr labels virion cores and tracks invading HIV-1 complexes in the target cell cytoplasm. Conversely, S15mCherry is incorporated into virion membranes. When this virus is added to target cells, the S15mCherry differentiates between fused virus, which has lost the S15mCherry membrane and is on a productive pathway, versus unfused virus that retains the S15mCherry membrane label.

These dual fluorescently labeled HIV-1 containing or lacking A3F are currently being examined in fixed and live cell studies using the DeltaVision microscope. Defining the A3F restriction mechanisms will enhance our understanding of retrovirus restriction by APOBEC3 proteins and may yield novel targets or therapeutic strategies to curb HIV-1 in vivo.



THEME A: UNDERSTANDING AND IDENTIFYING HIV: BASIC SCIENCE, BIOLOGY AND PATHOGENESIS

We report the case of a 30 year old Caucasian female who failed to achieve diagnostic Western Blot criteria for HIV infection, despite clinical and virological manifestations of the disease, and follow up at 15 months.

Initial serology showed reproducible reactivity with a combination Ab/Ag assay a positive p24 antigen detected by EIA, and an indeterminate Western Blot (p17,p24,gp120,gp160 bands) consistent with acute seroconversion. Repeat serology and follow-up was recommended, however further investigation was declined by the patient. A number of potential modes of acquisition of HIV were proposed and the timing of exposure could not be ascertained.

The patient represented 10 months later with a right forearm cubital fossa abscess thought related to skin penetration. Despite the absence of anti-retroviral treatment in the intervening period, her Western Blot had not evolved. The p24 antigen remained positive. CD4 T-cell count was $0.01 \times 10^9/L$ (1%) and HIV-1 viral load (Branched DNA) was extremely high at 340,449 copies/ml ($\log_{10} 5.53$). Genotype of plasma viral RNA showed a subtype B (95.8%) in RT and protease with prediction of full drug susceptibility. At this stage the patient commenced antiretroviral therapy in view of the profound immunodeficiency.

After 5 months of treatment CD4 count remains at $0.01 \times 10^9/L$ (1%), HIV-1 viral load has reduced to 14 783 copies/ml ($\log_{10} 4.17$) and genotyping shows a high level of resistance to the current drug regimen. HIV Western Blot remains unchanged.

This case illustrates an unusual course of incomplete development of a serological HIV Ab profile sufficient to make a positive diagnosis initially. Rapid progression to immunodeficiency is a characteristic of the reported cases of "seronegative" HIV infection and this patient's course is comparably poor so far. Reported cases of delayed/absent seroreactivity in HIV-1 infection are generally associated with high viral load, rapid disease progression and significant mortality.

The case highlights the value of p24 antigen and HIV Ab/Ag combination assays, the complicated nature of laboratory diagnosis of HIV even with current generation tests and the importance of molecular genotyping in the management of HIV especially cases with unusual course on treatment.

**POSTER NUMBER:
PAPER NUMBER: 734**

AN UNUSUAL CASE OF HIV SEROCONVERSION – DIAGNOSTIC AND PROGNOSTIC IMPLICATIONS

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 25

**HIV RISK BEHAVIOR AMONG
HIV-INFECTED PEOPLE IN SIX
HOSPITALS, THAILAND, 2008-
2009**

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Data on sexual risk behaviors of people living with HIV/AIDS (PLHA) are important to guide HIV prevention efforts. We assessed demographics and sexual risk behaviors for their association with unprotected sex among PLHA receiving care.

From January 2008-March 2009, PLHA attending 6 HIV or 4 OB/GYN clinics in 6 hospitals were selected for interview and chart abstraction using systematic sampling. We collected data on demographics, sexual risk behaviors, sexually transmitted infection symptoms, partner HIV disclosure and testing, and antiretroviral treatment (ART). Multivariate analysis was done for factors associated with unprotected sex.

Data were analyzed from 1,245 PLHA diagnosed >3 months prior to interview. Median age was 37 years, and 619 (50%) were women. Median time since HIV diagnosis was 60 months (range 3-252 months); 86% were on ART. Sex in the last 3 months was reported by 42% (520/1244). Of these, 87%, 12%, and 5%, respectively, reported sex with steady, casual, and commercial partners. Fifteen percent of men reported having sex with men. Last sex without a condom was reported by 13%, 9% and 8% of PLHA, respectively, with steady, casual, and commercial partners. Among those with steady partners, 88% had disclosed their HIV status to their partner and 80% reported knowing their partner's status. In multivariate analysis controlling for age, sex, hospital, pregnancy status, commercial sex, and partner HIV testing, factors associated with unprotected sex were not receiving ART (aOR=1.9, 95%CI 1.1,3.2), not disclosing HIV status to a partner (aOR=2.6, 95%CI 1.3,5.4), and receipt of care at a university hospital (aOR=1.8, 95%CI 1.1,3.0).

The majority of PLHA in care at 6 hospitals had protected sex and disclosed their HIV status to partners. Prevention efforts should be strengthened among PLHA not receiving ART and among those who have not disclosed their HIV status to a partner.

THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

Study participants' satisfaction for services provided is important to the success of any research organization. HIV-NAT is an HIV clinical research organization in Bangkok that was established in 1995 and has conducted over 100 studies with approximately 1500 HIV-infected adults and 250 children in follow-up. The rate of lost to follow-up has been less than 5%.

To assess study participants' satisfaction for the services that HIV-NAT provides in order to find ways to improve our organization.

A survey questionnaire was distributed to all patients who attended HIV-NAT clinic from February to June 2009. Data collected were: demographic data and satisfaction of HIV-NAT service, facilities and departments (Medical, Nurse, Pharmacy, Laboratory and Finance). This questionnaire used a five-level Likert scale ranking from 1 (strongly disagree) to 5 (strongly agree). Data were quantitatively analyzed to obtain frequencies, percentages, and means. Transformed scores were used where appropriate.

Of 286 questionnaires distributed, 252 responses were from study adult participants (88.1%), 20 were from caregivers of pediatric participants (7.0%) and 14 were not answered (4.9%). There were 161 males (56.3%) and 202 (70.6%) lived in Bangkok and its vicinity. Age ranges of the respondents were: 31-40 years old (n=120), 41-50 years old (n=80) and 21-30 years old (n=33). Levels of education were high school (n=116, 40.6%), Bachelor's degree (n=86, 30.1%) and primary school (n=53, 18.5%). Majority had attended HIV-NAT clinic for more than 2 years.

78.52% were satisfied with all the services. 81.04% were highly satisfied with the services they received from the physicians and nurses. 79.31% were satisfied with the pharmacy department and 70.19% were satisfied with the Financial Department. Only 54.46% were unhappy with the laboratory because of the waiting time for phlebotomy. 85.66% were satisfied in participating in the studies. 87.06% reported always receiving a smile with their services from all departments. The most common recommendation was to expand HIV-NAT's facilities to allow for more space for study participants.

Most of the study participants were satisfied with HIV-NAT's services. The recommendations received are useful for improving our organization. HIV research organization should periodically assess their participants' satisfaction and improve their services accordingly.

POSTER NUMBER:
PAPER NUMBER: 619

**ASSESSMENT OF STUDY
PARTICIPANTS' SATISFACTION
OF SERVICES PROVIDED
BY A CLINICAL RESEARCH
ORGANIZATION IN BANGKOK**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 784

**GENERAL PRACTICE CLINICS
CAN TREAT HIV PATIENTS FOR
HEPATITIS B, WHY NOT ALL
PATIENTS?**

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The primary goal of chronic hepatitis B (CHB) therapy is to prevent hepatitis B virus (HBV)-related morbidity and mortality, which are more likely in people with HIV infection. However currently treatment for CHB is restricted to specialist clinics, except in the case of HIV-positive patients where HIV therapy can be used for HBV treatment and thus managed by general practice (GP) clinics with S100 prescribers.

Between 2006 and May 2010, 135 patients with CHB attended a large urban GP clinic with a high case load of HIV-positive patients. We conducted a retrospective audit of a random selection of medical files from CHB patients and assessed the characteristics of the patients, the frequency of attendance, HBV viral load testing, treatment and referral patterns. Outcomes were compared in HIV-positive and HIV-negative patients.

Of the 44 patients with CHB selected for the audit; 19 were HIV-positive and 25 were HIV-negative. Of the HIV-positive patients, 95% were males, 95% were men who have sex with men (MSM), 32% were overseas-born and the median age was 49 years (range:37-55 years). Of the HIV-negative patients, 76% were males, 45% were MSM, 50% were overseas-born and the median age was 44 years (range: 25-62 years). On average, HIV-positive patients with CHB attended the GP clinic 28 times during the study period and 2.5 HBV viral load tests were done by GP clinic. Whereas, on average, HIV negative patients attended the GP clinic 15 times and had 1 HBV viral load test done by the GP clinic. Among the HIV-positive patients, 84% were on HBV therapy and in 69% of these cases therapy was administered by the GP clinic with a negative current HBV viral load result in 73% of these patients. Among the HIV-negative patients, 22% were on HBV therapy and in all cases the therapy was administered by the specialist clinic but co-management of CHB occurred with the GP clinic.

Our audit has demonstrated that most HIV and CHB co-infected patients of the GP clinic are receiving suppressive HBV therapy within the GP environment. However HIV-negative patients with CHB require specialist referral and appear to have a much lower uptake of treatment. Greater involvement of primary care clinics may result in improved management of CHB patients. Further investigation is needed to assess the feasibility of this proposal.

POSTER NUMBER:
PAPER NUMBER: 671

**PILOT MODEL OF NURSING
COORDINATION FOR HIV
POSITIVE CLIENTS AT SOUTHERN
HEALTH, MELBOURNE**

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In this paper we describe the introduction of a new nursing role in HIV coordinated care at Southern Health in Melbourne, Victoria. We present two case studies illustrating the benefits and limitations in the early evaluation of this role.

In 2009, a review by the Department of Health of HIV services in Victoria led to funding of four pilot projects utilizing a Hospital Admission Risk Program (HARP) Chronic Disease Management intensive co-ordination model. Southern Health successfully tendered for one such position. In 2008-9 Southern Health had over 40 sites and 6 main hospitals and served 519 968 out patients including 125 HIV-positive clients. This new nursing role commenced in October 2009 at Monash Medical Centre (MMC).

HIV-positive individuals were identified and referred to the HARP program from health professionals including Infectious Disease Physicians, Royal District Nursing Service (RDNS) HIV Team CNCs, MMC Social Work Department and HIV Ambulatory Care nurses. Clients were assessed by the HARP CNC, and if they met the eligibility criteria they were admitted to the program.

The CNC role encompassed specialist assessment with the use of standardized tools, and close collaboration with community agencies. In the initial 8 months, 16 people have been recruited and 5 discharged from the HARP pilot program. The case studies to be presented outline some benefits and challenges presented in this new and dynamic role, and describe some of its outcomes.

The introduction of a new HIV HARP CNC role has resulted in beneficial interventions for MMC clients with HIV and complex psychosocial needs. It has been noted that improved communication and collaboration with community agencies and GPs has led to greater access to community-based services for this client group. Some challenges have also been encountered. Whilst external evaluation is pending, it is apparent the role has impacted positively on care and promises to provide ongoing benefits for this client group.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

People with HIV in NSW are surviving longer and growing older. Access to quality health care for the clinical management of HIV and rapid diagnosis and management of other health conditions is of fundamental importance. Research findings and information from service providers and people with HIV in NSW suggests a diverse and sometimes poor knowledge of non-HIV health services. The timely ability to confidently navigate a complex health system, when there is a new health condition (HIV or non-HIV related) significantly effects health outcomes.

Positive Life sought to identify factors that impact on access to health care services with the aim of developing and piloting a program that orientates people with HIV (and their partners, families or carers) to new or different parts of the health care system. It will also assist them to advocate for their health care needs and their rights as health consumers.

Focus groups were conducted with people with HIV, counsellors and psychologists, enhanced primary care workers, HIV front-line service staff, area health service clinical nurse consultants and NGO support workers in metropolitan and regional NSW

This presentation describes the processes and development of the project pilot as well as broader issues for consideration by GPs, specialists, and other health professionals in the context of changing health needs for people with HIV. Identified issues include: policy and advocacy; the need for resources to assist people to navigate the health care system and find services; tools for managing relationships with primary health care providers; health care consumer rights, and workforce issues for health professionals.

POSTER NUMBER:
PAPER NUMBER: 794

**IN 2010, PEOPLE WITH HIV HAVE
EVOLVING NEEDS FROM HEALTH
SERVICES: A PILOT PROJECT
OFFERING HEALTH ADVOCACY,
LITERACY AND PEER SUPPORT**

[Feeney L](#)

Positive Life NSW Australia

THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 735

**DEVELOPMENT OF A SECURE,
MULTIDISCIPLINARY HIV CLINIC
ELECTRONIC MEDICAL RECORD
(EMR) USING CERNER MODULES.**

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The Electronic Medical Record (emr) has the potential to improve the efficient delivery of patient care and reduce clinician errors but its widespread adoption in clinic settings has been constrained by data security considerations. Modern IT systems have the capacity to ensure security of clinical data by restricting the range of data available to those accessing the IT system. Controls include restrictions on which patients records are viewable, on categories of data or tests in a laboratory information system and clinic specific restrictions. Clinicians and others eg booking staff, involved in the patients' health service interaction have quite different information needs. Existing e-records often contain sensitive information and expansion of e-records to an HIV clinic results in a compelling need to develop electronic solutions to security issues pre-emptively..

In development of an HIV clinic emr in a CERNER IT environment we chose the most secure option available giving the ambulatory HIV clinic the status of a "virtual organization" with staff of the clinic, its ambulatory care support community service and those to whom the clinic patients were regularly referred being given access to the clinic e-record whereas general clinical users of the IT system are blind to the presence of an HIV clinic visit and its e-record. Non-HIV diagnoses and problems treated incidentally within the HIV clinic flow through to the patients' individual e-record list accessible to the broad service clinical staff but HIV specific diagnoses do not appear; the general user of the IT system is made aware by a warning that the viewable emr is incomplete and prompting their referral to a higher level access staff member to release the hidden clinic data if needed.

Balancing the need for specific protection of HIV data and ensuring that important clinical data is not denied to treating practitioners has resulted in redesign of the work practices in the clinic and communication/ correspondence sections. Early experiences with the first phase of the e-record have been favourable but specific issues have resulted in modification and ongoing development is proceeding .



**THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV****ADHERENCE**

Access to HIV antiretroviral therapy (ART) has expanded rapidly in Cambodia, where approximately 0.9% of adults are HIV infected. At the end of 2009, 37,315 people were receiving ART at 52 treatment sites across 20 provinces in the National HIV treatment and care program.

A National database, and implementation of data management standard operating procedures was introduced to Provincial ART sites in 2007.

Data managers and clinical staff at the NCHADS Social Health Clinic (SHC) in Phnom Penh conducted a project to provide additional support for the establishment of good quality data collection, recording and management procedures in ART treatment sites in three provincial referral hospitals.

We describe the project activities, and summaries of serial datasets to demonstrate data quality improvement over the course of the project.

Initial training was provided for data entry and clinical staff, including data recording, entry and management. Baseline datasets were collected from each site. Over the following 18 months, support was provided for meetings between data and clinical staff 1 – 2 times each month. Five follow up datasets were collected from each site, summarised, checked for missing data, and feedback to each site. Four mentoring and feedback visits were undertaken to each site during the project period.

At baseline, data from the three provincial sites was noted to be missing in 38.6% of 4 key variables in each of 74,928 initial and subsequent visit forms. The first follow up datasets revealed missing data for the same variables in 31.4% of 3,388 forms. The final datasets 18 months after commencement found missing data for 13.7% of variables in 2,955 forms.

Over the 3 sites, rates of missing data at baseline and at 18 months were; Site 1: 52% and 10.4%, Site 2: 29% and 21%, Site 3: 34.6% and 7.6%.

These results suggest that training, mentorship, feedback of data quality, and regular communication between clinic and data staff effected an improvement in the quality of National HIV treatment program data. This should enhance the utility of the data for planning and monitoring of treatment programs, and the conduct of operational clinical research.

POSTER NUMBER:
PAPER NUMBER: 791

**QUALITY IMPROVEMENT IN
OBSERVATIONAL HIV CLINICAL
DATA, AT PROVINCIAL SITES IN
CAMBODIA**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 697

**SOCIO-DEMOGRAPHIC AND
CLINICAL CHARACTERISTICS
ASSOCIATED WITH
ADHERENCE TO HIGHLY ACTIVE
ANTIRETROVIRAL THERAPY
IN HIV-INFECTED ADULTS IN
YOGYAKARTA, INDONESIA.**

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Background

Antiretroviral therapy national program has been started since 2005 in Sardjito Hospital. 95% adherence is needed to achieve optimal treatment outcome. None evaluation has been made on the adherence level among HIV seropositive patients who underwent ART program within hospital. Thus it is critical to evaluate the adherence level and to understand socio-demographic factors associated with adherence level. This study examined independent contribution of adherence including age, gender, address, social insurance, clinical status at the beginning of therapy including HIV stadium, CD4 level and functional status and regimen.

Method

We evaluate adult HIV patient's medical record from January 2007 – December 2008 from HIV clinic at Sardjito Hospital. Social-demographic, clinical status, anti retroviral therapy data were collected through medical record. 95% adherence is defined as number of missing dose is less than three doses within 30 days of therapy. We assessed the adherence for sixth month periods and twelve months periods. Incomplete medical records were excluded from the study. We combined descriptive and analytic technique to analyze the data. Relation between independent variables and adherence were analyzed using chi square.

Result

Among 185 medical records, 131 (70%) were met the eligible criteria of study. From 131 patients, at six month assessment 8 (6.1%) patients had died and only 50% patients had 95% adherence level. At twelve months assessment, two patients died and the number of adhere patient was decreasing into 45%. There were no significant relations between sex, age, living outside the province, having social insurance and six months adherence level. Adherence level was not influenced by clinical status at the beginning of therapy. Treatment adherence was not likely related to the treatment regimen.

Conclusion

The results suggest that adherence level was not solely influenced by socio demographic and clinical factors. Creative strategy has to be made to increase and maintain the adherence level among HIV patients who underwent the ART program, particularly in Indonesia.



**THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV****ADHERENCE**Introduction

Adherence to antiretrovirals is crucial in the management of HIV infection. In a recent meta-analysis by Nathan Ford et al, directly observed therapy was found to not be useful in HIV patients at a population level.

Method

The purpose of the audit is to determine the effects of directly observed therapy with older generation of antiretroviral, in patients with difficulties of adherence resulting in the fall of CD4 count below 300 and viral load above 4000 copies/ml among a selective cohort of patients in a population of 300 HIV positive patients between 31/08/2007 and 31/03/2010. The period of observed therapy varied between 7 to 12 months.

Inclusion criteria

Patients who agreed to supervised therapy with older generation of antiretroviral

Exclusion criteria

Warranting new generation of antiretroviral (integrase inhibitors, chemokine receptor inhibitors, etravirine)

Wish to go on new generation antiretroviral

Unavailability of pharmacist at the point of care(resource poor setting)

Patients declined supervised therapy

Patient failing, but CD4 count over 300

Results

66.6% achieved viral load below 400 within 7/12

33.3% achieved viral load below 50 within 7/12

33.3% achieved CD4 count over 350 within 7/12

100% remained free of hospital admissions, opportunistic infections and new resistant mutations during the period of observed therapy.

Conclusions

Significant improvement of viral load and CD4 counts achieved in all patients, during the period of directly observed therapy.

This audit shows that, in patients with significant adherence difficulties, still possible to achieve VLM < 400 with older generation of antiretroviral by directly observed therapy (provided no genotype resistant)

POSTER NUMBER:**PAPER NUMBER: 116****MANAGEMENT OF DIFFICULT PATIENTS.**

AUDIT:VALUE OF DIRECTLY OBSERVED THERAPY WITH OLDER GENERATION OF ANTIRETROVIRALS, PRIOR TO STARTING ON NEW GENERATION ANTIRETROVIRALS; EXPERIENCE FROM A RESOURCE POOR SETTING IN UNITED KINGDOM (UK)

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 316

**TASER-M : A REVIEW OF THE
COHORT AND GENOTYPE
SEQUENCE FILE TRANSFERS
– A DATA MANAGEMENT
PERSPECTIVE.**

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TASER-M is a study that aims to evaluate the emergence of HIV drug resistance by monitoring virologic response and patterns of HIV drug resistance in patients initiating or switching combination antiretroviral therapy in selected TREAT Asia clinical centres.

Sites are required to submit genotype sequence (FASTA) files with their clinical data. FASTA files are submitted to Virco (Belgium), which are then processed in vircoNET2™, a proprietary software system designed to interpret the sequences into a virtual phenotype (virco®TYPE HIV-1). This process was actively put into practice during the enrolment phase of the study.

This study aims to describe the demographics of the TASER-M cohort and the use of vircoNet2™ to process genotypic HIV drug resistance data. Baseline descriptive statistics were obtained from the September 2009 cohort, including sites from Thailand, Malaysia, Hong Kong, Philippines and Indonesia. Separated PR and RT regions were combined in SAS. The sequences, together with site ID, patient ID, specimen date and sample ID were emailed to Virco, which then provided simultaneous virtual phenotype and customized genotype interpretation through vircoNET2™.

There were 1237 naive and 66 experienced patients. Naive group: 69% male; median age 36 years; 60% Thai; 67% acquired HIV through heterosexual contact. Experienced group: 59% male; median age 39 years; 58% Thai; 74% acquired HIV through heterosexual contact. Approximately 1000 sequences from six sites have been cleaned and submitted to vircoNET2™. Two sites required further editing of sequences before uploading.

The PDF summary report contains the vircoTYPE™ HIV-1 drug resistance interpretation, and a Therapy Edge™ (ABL, Luxembourg) genotype interpretation, listing NRTI/NtRTI, NNRTI and PI mutations. Results are also available in XML format for further analysis.

Submission of FASTA files to vircoNET2™ allowed for direct interpretation of HIV mutations after aggregated file upload, bypassing errors arising from site-level data entry. It provides clinicians with combined phenotypic and genotypic information for the assessment of HIV drug resistance. Because vircoNET2™ is a standard tool used in many clinical trials, the application of this system to the TASER-M cohort allows for more clinically accurate assessment of a population with diverse HIV subtypes.



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV**ADHERENCE**

manpower shortage and a high rate of burn out. The reach of counselors is limited to the clients they counsel, with no reach into the community at large. PLHA volunteers can be used to fill up this void with minimal burden on the Government and with a better reach into the society.

To assess the proportion of PLHA affirming to work as peer educators/counselors and study if the duration of HIV positivity influences this decision.

Cross sectional study of 1500 randomly selected PLHA from March 2009 to July 2009 at GHTM. 750 were sero-positive since 1 year and not initiated on HAART and another 750 were sero-positive for more than three years and were on HAART.

Majority of PLHA in both the groups willing to work as peer educators were married, males, in the age group 25 to 44 years, earning between Rs 1500 to 3000 per month and educated up to primary or secondary. The proportion opting to work for free as peer educators was substantially lower than those who wanted to be paid.

Majority of PLHA in both groups wanted to work as peer educators as volunteers than for payment. The Government can tap this resource pool to enhance the effectiveness of HIV/AIDS related work in the community. The duration of HIV positive status did not influence the will to be counsellors/peer educators in PLHA.

POSTER NUMBER:
PAPER NUMBER: 79

**PEOPLE LIVING WITH HIV/
AIDS AS PEER EDUCATORS/
COUNSELLORS: A STUDY AT
THE GOVERNMENT HOSPITAL
OF THORACIC MEDICINE
TAMBARAM, (GHTM) INDIA.**

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Care Hospital India
The field of HIV counseling faces

Introduction

While combination antiretroviral therapy (cART) has revolutionised the course of HIV infection, a high level of adherence to cART is required to achieve the full mortality benefit of cART.

While a number of studies have investigated factors associated with non-adherence to cART, there has been considerable variability in the findings. In the current study we set out to determine which personal, socioeconomic, treatment-related and disease-related factors are independently associated with adherence to antiretroviral therapy (ARV) in an Australian sample of people living with HIV (PLWH).

Methods

Using data from the HIV futures six survey, an anonymous cross-sectional survey of PLWH in Australia, we conducted bivariate and multivariate analyses to assess the association of a number of factors with self-reported difficulty taking ARV. Chi-square and t tests were used for bivariate analysis. A two-step logistic regression modelling procedure based on backwards stepwise regression was used for multivariate analysis. Any factors that demonstrated a significant association at the level of $\alpha=0.2$ in bivariate analysis were included in the multivariate analysis.

Results

Following an extensive literature search, we identified 75 variables within our data set that were likely to be associated with difficulty taking ARV. Of these, 45 met the criteria for inclusion in multivariate analysis. The following factors were found to be independently associated with difficulty taking ARV at the level of $\alpha=0.05$: younger age, alcohol and party drug use, diagnosis of a mental health condition, poor or fair self-reported health, living in a regional centre, taking more than 1 ARV dose/day, experiencing physical adverse events in the last 12 months or health service discrimination in the last 2 years, using a nucleotide analogue reverse transcriptase inhibitor or protease inhibitor and the following specific attitudes: not believing in the benefits of ARV, concern about medication efficacy in the future and thinking that ARV tablets were an unwanted reminder of having HIV.

Conclusion

The multitude of factors found to be independently associated with difficulty taking ARV reaffirms the dynamic nature of adherence behaviour and the ongoing importance of addressing adherence behaviour in the clinical management of PLWH.

POSTER NUMBER:
PAPER NUMBER: 325

**FACTORS ASSOCIATED
WITH DIFFICULTY TAKING
ANTIRETROVIRAL MEDICATION
IN AN AUSTRALIAN SAMPLE OF
PEOPLE LIVING WITH HIV.**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 203

**A REVIEW AND COMPARISON
OF THE ORAL HEALTH STATUS
AND SOCIAL IMPACT OF
ORAL CONDITIONS AMONG
HIV PATIENTS WITH THAT OF
GENERAL DENTAL PATIENTS
RECEIVING PUBLICALLY FUNDED
DENTAL CARE IN SOUTH
AUSTRALIA.**

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Oral manifestations of HIV are well described with research indicating that oral lesions associated with HIV may occur in over 50% of HIV/AIDS patients. Oral lesions often present as early signs and symptoms of the infection and commonly include HIV gingivitis and periodontitis, and other opportunistic infections such as candidiasis, and human papilloma virus (HPV) papillomas.

Prior to the introduction of Highly Active Anti-Retroviral Treatment (HAART), the incidence of oral manifestations was high. The post HAART era has seen a reduction in the prevalence of these conditions. For example, the presentation of HIV-related periodontal disease is now more often associated with failure or cessation of HIV treatments or pre-anti-retroviral therapy. In addition some HIV periodontal diseases may recur even if good viral control is achieved, with co-factors such as stress and smoking appearing to have a role in their re-emergence. A recent preliminary retrospective analysis, which looked at the oral health and treatment needs of people infected with HIV, identified that patients on HAART still had significant oral health needs, including high levels of oral candidiasis, angular cheilitis, HPV papillomas, traumatic ulcerations and xerostomia.

In Adelaide, South Australia, a publicly funded dental clinic specifically dedicated to the management of the oral health needs of persons with HIV infection was established in 1991. A study undertaken in the clinic in 1992-1993 prior to the development of HAART, identified that much of the oral pain was attributable to HIV-related periodontal disease, and that patients with HIV infection were substantially disadvantaged with regard to the social impact of oral disease. The HIV cohort in this study was predominantly homosexual, male and many had a history of intravenous drug use. A repeat of this study in 2009-2010 has provided us with updated information on the oral manifestations of HIV, treatment requirements and the oral health related quality of life issues in the current cohort of patients.

POSTER NUMBER:
PAPER NUMBER: 824

**CONDUITS AND CONTINUITY -
BRIDGING THE GAPS FOR HIV
TREATMENTS INFORMATION
SUPPORT**

McDonald J, Perri V, Canavan P, Ogier A, Condon J, Daye J, Kellie M, Donohoe S, McKellar-Stewart N, O'Day J, Ratcliffe N, Jones L, Martinez C, Riches M, Tsangaris M, Watts P, Pena Z, Raines K.

Treataware Outreach Network (TON) – National Association of People Living with HIV (NAPWA)

This paper will briefly chart the history of TON, constituted under the aegis of the National Association of People Living with HIV/AIDS (NAPWA), and reflect on the changing environment in which it has worked. It will describe the services and health promotion actions which it seeks to deliver, the characteristics of the clients who access its services, and the outcomes which it has achieved in the past 2-3 years.

TON members represent their parent organisations which may be AIDS councils or PLHIV organisations. The work done by individual members varies considerably. Despite this variation, it is true to say that TON members operate out of a health promotion framework, seek to create supportive environments for PLHIV and build their personal skills. It does this by providing information, educational programs and support to enable PLHIV to increase their social inclusion, improve their health literacy, undertake necessary health work and effectively self-manage their HIV disease.

TON has a unique role in providing information and support which enables PLHIV to understand their treatments and primary health care. It assists them to modify lifestyle practices and embrace preventative health care goals. It operates alongside primary health carers and seeks to add value to the services they receive from clinicians and other health providers.

Increasingly TON members are required to support PLHIV as they live with poly-pathologies associated with HIV infection, HIV treatments and normal ageing. TON provides information, education and personal support to PLHIV as they live with the complications of HIV as an inflammatory disease.

As the clinical care of HIV changes TON members will be required to acquire new skills and build their collective body of knowledge around HIV and its complications. The presentation will describe some of the actions which it will take to achieve this. Additionally it will increasingly be required to advocate for the rights and needs of PLHIV to access a range of HIV antiretroviral drugs and appropriately designed health promotion campaigns. It does this work from the position that many people with HIV seek information and support from TON members, and that TON members are best able to understand and represent their issues.



**THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV****ADHERENCE**

The procurement of ART in Papua New Guinea (PNG) is a dilemma faced by the service providers and people living with HIV (PLHIV) at Mt Hagen Catholic HIV/AIDS Services in its Rebiamul Care and Treatment Centre. With the problem of funding from Global Fund to purchase the needed life giving drugs, the services providers and PLHIV are anxious on the continuity of treatment after 31st of August 2010.

Based on daily observations, local knowledge and clinical records, the antiretroviral therapy has given life back to the PLHIV who were suffering from severe body disfigurement, very weak and were affected by all kinds of illnesses. When they are put on ART regiment, they undergo tremendous improvement with their health. As reported in the National Newspaper (Egu, 2010), 'ART is our resurrection therapy and it is our life'...

With over 500 clients registered on ART and another 500 on bactrim, the clinic is profoundly affected with the question on continuing to provide the services. The voluntary counseling and testing clinic alone detects 5 – 8 cases of new infection everyday while approximately 30 new patients are commenced on ART every month by trained nurse-prescribers, following the World Health Organization (WHO) guidelines to start people on base line treatment.

There is also on going clinical mentoring received from different organizations such as Australasian Society of HIV Medicine to capacity build the nurses. While the Church has the capacity both in human resources and facilities to roll out the HIV programs to the rural areas, the short fall in funding could have adverse impacts on clients and implementing the plans.

The abstract will focus on the life changing impacts of ART on the PLHIV, the clinical situation and the anticipated outcomes of non procurement of ART drugs that will affect various institutions and consumers.

POSTER NUMBER:
PAPER NUMBER: 763

**CHALLENGES OF
ANTIRETROVIRAL THERAPY (ART)
IN PAPUA NEW GUINEA**

Mek AK

Australasian Society of HIV
Medicine, Sydney
NSW, Australia

THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 293

**WHY BE AN 'HIV DOCTOR'? KEY
INFORMANT INTERVIEWS IN
THE HIV GENERAL PRACTICE
WORKFORCE PROJECT**

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The number of people living with HIV in Australia is increasing and ageing, requiring an expert primary care workforce to provide HIV clinical care into the future. Yet the numbers of general practitioners (GPs) training as HIV s100 prescribers may be insufficient to replace those retiring, reducing hours or changing roles. This paper describes the first stage of a three-year study which explores why and how GPs commence or continue careers in HIV in different caseload and geographical settings across Australia.

Semi-structured interviews were conducted face-to-face (14) and by phone (10) between February and April 2010 with 24 'key informants' in senior policy, advocacy, and education roles in government and non-government organisations across all states and territories. Participants included 17 men and 7 women with a range of professional backgrounds including medicine, allied health, public service and community advocacy. 5 participants self-disclosed as HIV positive. Interviews explored key contemporary issues in HIV clinical care, general practice and the social and political context of HIV in Australia. Most participants focused on national or state-level issues, but three focused on specific populations.

De-identified transcripts were coded according to the principles of interpretive description and a thematic summary was constructed around the central question of 'why GPs work in HIV'. This model reveals three sets of 'interests' that key informants believe shape GP career decisions: 1) 'clinical interest' (eg. diverse patient needs); 2) 'political interest' (eg. identity politics); and 3) 'professional interest' (eg. business sustainability). Additional themes span two or more interest categories, including patient relationships, shared care models and workforce distribution.

Key informants conceptualise these GP 'interests' in quite distinct ways, with direct relevance for the design of workforce development programs. Forthcoming interviews with clinicians will provide important data to test this model and identify new opportunities to grow and support the HIV general practice workforce in Australia. This analysis has informed the development of question guides for the clinician interviews, which includes current and 'ex'-s100 prescriber GPs, other members of the general practice team, and GPs and Registrars who may (or may not) be interested in working in HIV.

POSTER NUMBER:
PAPER NUMBER: 299

**BETTER HEALTH THROUGH
WORDS AND PICTURES: THE
ROLE OF AN HIV COMMUNITY
MAGAZINE**

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National Association of People Living With HIV/AIDS, Newtown, NSW, Australia

In Australia, more HIV positive people consult magazines or newspapers for information about living with HIV than they do any other source. And more of them read Positive Living than any other HIV-related publication.

The magazine is produced four times a year by the National Association of People Living with HIV/AIDS (NAPWA) and is made available in both electronic and hard copy formats. 70,000 copies are printed and these are mailed directly to subscribers, inserted into Gay community newspapers in New South Wales, Victoria and Queensland or distributed at positive services and clinics nationwide. A 2009 survey of readers indicated that Positive Living is highly regarded as a source of treatment information, particularly by those living longer-term with HIV. Of the sample, 48% claimed it was either very important or their most important source of treatment information. Over half of all respondents had been reading the publication for more than five years, 63% said they read every edition and just over a third reported that they read the entire magazine from cover to cover.

Very few responses were received from younger or CALD people. This has led to efforts to increase participation from within these groups as well as to distribute the magazine to more youth- and multicultural-oriented HIV services.

The survey also asked demographic questions about readers and their expectations of the publication. Based on these responses and other relevant social research, this paper will explore the value of peer-based HIV reporting as well as the ability of community media to inform and support people so that they can live better with HIV.



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

This presentation reports on the results of an insomnia treatment group that was delivered for men who have sex with men (MSM). Self perceived changes in onset and maintenance of sleep and mood (the main daytime impact of insomnia) will be presented for pre and post group comparisons and at a booster session conducted 3 months after completion of the group. The presentation will explore the ways in which the sleep education was delivered to MSM, given that the source content for the course was not tailored to gay men. The final part of the presentation reports on the impact the sleep intervention had on the general health and well being of two HIV positive participants who presented with relatively complex health issues.

The evaluation data attesting to the success of this sleep intervention were not unexpected considering the volume of evidence behind the therapeutic approach used in this group. For example, severity of insomnia for 19 participants went from moderately severe clinical insomnia (18.32) pre-course, to sub-threshold insomnia (8.08) post-course, and then remained at sub-threshold insomnia (7.75) at the Booster session up to 3-months post course. This data and more will be presented to illustrate the long term benefits for participants. The presentation will also explore reported participant outcomes that impacted on other parts of their health and wellbeing. The presentation will demonstrate that little adaption needed to be made to make the group "gay-specific".

The SA HIV Action Plan 2009 – 2012 identifies the need to improve the coordination of care for people with HIV across the spectrum of need and to connect those isolated from care or lost to follow up to appropriate primary care throughout their life with HIV.

In 2009 the Royal District Nursing Service of SA Inc. (RDNS), was funded by SA Health to develop and implement a statewide, nurse led, model of assessment and care coordination for people with HIV which in collaboration with a broad range of agencies can be directly integrated with the person's HIV primary medical care. RDNS established a steering committee of government, HIV medical specialists, General Practice SA, community based organisations and people living with HIV to oversee the development and evaluation of the model of care. The RDNS research unit conducted a literature review on HIV models of care to inform the steering committee on best practice care coordination for this population. The National Association of People Living with HIV/AIDS was consulted on the program and developed a Quality of Life scale to be used as part of the standardised assessment.

In April 2010, RDNS commenced a 6 month pilot of the model of care coordination across both primary and tertiary care sites. A total 50 people living with HIV/AIDS will be referred into the program, including people newly diagnosed with HIV and those who require complex care coordination. The evaluation of the pilot project will inform the future delivery of primary care coordination for people living with HIV/AIDS in the state.

This poster will summarise the literature review, model of care, assessment tools and patient pathways.

POSTER NUMBER:
PAPER NUMBER: 572

**THE IMPACT OF INSOMNIA
TREATMENT GROUP ON THE
HEALTH AND WELLBEING OF
TWO HIV POSITIVE MEN**

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POSTER NUMBER:
PAPER NUMBER: 256

**SOUTH AUSTRALIAN HIV/AIDS
PRIMARY CARE COORDINATION
PROGRAM**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 577

**HAART TO HEART: ENGAGING
PEOPLE LIVING WITH HIV IN
NUTRITION AND EXERCISE
INTERVENTIONS**

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Cardiovascular disease (CVD) has emerged as a common issue in the care of people living with HIV (PLHIV). The prevalence of CVD has increased in the last decade in these patients and multiple factors have been implicated including HIV per se, higher rates of smoking, and antiretroviral (ART) use. Lifestyle interventions including diet and exercise have been shown to be effective in reducing CVD risk in PLHIV.

This study aimed to pilot a lipid monitoring screening program to engage clients at the point of receiving their CVD risk result in behavior change, specifically exercise and altering dietary intake.

PLHIV attending an ambulatory HIV care clinic were invited to participate in a lipid screening program during routine care. The screening process and 6 week visit included a fasting finger prick sample for blood lipid profiles (triglycerides (TG), total cholesterol (TC), low-density lipoproteins (LDL), high-density lipoproteins (HDL), TC:HDL ratio) and CVD risk using Framingham equation which were quantified by automated enzymatic methods (Cholestech LDX analyser).

A total of 38 PLHIV participated in the screening process. Of these, 36(95%) participants were found to have a 10-year CVD risk $\geq 1\%$ and were offered brief nutrition counselling. Twenty participants (20/35, 57%) agreed to receive one-on-one counselling sessions with a Dietitian and an Exercise Physiologist for two sessions respectively over 6 weeks. Fourteen (70%) participants with a mean age of 55.2 ± 6.7 years completed the 6-week visit. The mean duration of HIV infection was 14.6 ± 8.4 years and 12(86%) were on antiretroviral treatment. Lipid profiles measured showed an improving trend at week 6. Reduction was observed in TG [0.4mmol/L (18.2%)], TC [0.2mmol/L (4.2%)], LDL [0.2mmol/L (6.9%)] and TC:HDL ratio [1.0 (17.0%)]. There was an increase of 8.2% (0.08mmol/L) in HDL. Average physical activity levels measured by the International Physical Activity Questionnaire (n=12) increased by 92.3% (2520.2 metabolic equivalent-minutes per week).

The preliminary findings show that a combination nutritional and exercise counselling may have a favourable effect on lipid profiles and physical activity levels. Individualised dietary and exercise advice as well as lifestyle coaching can help PLHIV with CVD risk factors improve their health outcomes.

THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV**ADHERENCE**

HIV and AIDS are major health problems in Indonesia. Yogyakarta province is also facing an alarming epidemic with high increase of cases, both hospitalized and outpatient. The HIV and AIDS services in Dr. Sardjito hospital just started in 2005 with the establishment of Edelweis (HIV) clinic. This paper is aimed to present data on the utility of services and several outcome indicators. Issues of lack of health care system in the hospital will be discussed.

Database of HIV and AIDS patients attending Dr. Sardjito hospital since 2004/2005 until present were closely analyzed and presented.

As many as 379 HIV-infected people have been registered in HIV and AIDS database of the hospital since 2004. From this, there are 178 people (46,9%) who are still on ART and 23 others are in pre-ART register currently. There are 69 (18,2%) mortalities and 17 (4,5%) have been moved to other HIV centers. As many as 78 individuals (20,6%) are loss to follow up. The remaining 14 cases are children under 15 years old. TB-HIV co-infections are noted in 78 (20,6%) cases. Out of the 178 cases on ART, 104 are still in original first line regimens, 67 are substitutes cases, whereas 7 have been switched to second line regimens (PI-containing regimens).

AIDS-related death has been reduced since the introduction of ARV treatments. In this cohort, there are 18,2% AIDS-related deaths. This number is mostly contributed by the very late presentations of patients (stage 3 and 4) on admission. The hospital still face high number of 'loss to follow up' cases (20,6%), of which relates to both patient and service factors such as lack of community support and collaboration of hospital with local support groups.

Dr. Sardjito hospital as one of the main referral hospitals still needs some improvements to provide better service to patients with HIV and AIDS. Preventive measures and information on HIV should be increased to prevent patients from coming late for treatment. Collaboration with local support groups may contribute to reduce numbers of loss to follow up cases.

The Friendly Carer Association is an association formed by people living with HIV/AIDS (PLHIV) and volunteers from Rebiatul VCT Centre, run by the Catholic Archdiocese of Mt Hagen. The association was formed to address the increased number of stigma and discrimination cases which was at its peak in 2008. People who had contracted the virus were looked at with scorn and labeled. Young positive girls were burnt alive in abandoned old houses, buried alive or were isolated in big forests to die lonely deaths by relatives to show face and avoid stigma and discrimination by the whole community. People lived in fear. No one was willing to come out of their closets and admit that they had contracted the virus.

Bold steps were taken by 8 PLHIV in early 2008 to form the Friendly Carer Association and admit that they were positive and were on ART. Since then, the Association had gained popularity and strength. The membership had increased from 8 to 170 in May 2010. They had received good counseling, training, care, support and respect from the VCT counselors, nurses and volunteers which had enabled them to participate in 2 World AIDS Days march, go on awareness and do radio programs confidently. The abstract is to present the success story of an initiative taken by PLHIV to counter the abuses experienced at the hands of families, relatives and communities.

POSTER NUMBER:
PAPER NUMBER: 688

FIVE YEARS OF HIV AND AIDS SERVICES IN DR. SARDJITO TEACHING HOSPITAL, YOGYAKARTA, INDONESIA

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POSTER NUMBER:
PAPER NUMBER: 762

FRIENDLY CARER ASSOCIATION – BREAKING THE BARRIER OF SILENCE

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 755

**BASELINE HEALTH AND
NUTRITIONAL STATUS OF PEOPLE
LIVING WITH HIV ATTENDING
THE HIV AND NUTRITION CLINIC
IN CHAMPASAK PROVINCIAL
HOSPITAL, LAO PDR**

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Champasak Provincial Hospital, Lao PDR, has recently established its Human Immunodeficiency Virus (HIV) and Nutrition Clinic through support from the Lao-Thai-Australian Collaboration in HIV Nutrition (Lao-TACHIN) project since July 2009. The clinic provides comprehensive HIV care, support and treatment services including anti-retroviral treatment (ART) and nutrition clinical services. We summarized health and nutritional status of people living with HIV (PLHIV) receiving services at the HIV and nutrition clinic during the beginning phase of the project.

Completed patient information records of HIV-infected clients who presented to the HIV and nutrition clinic from July 2009 to May 2010 were reviewed. Demographic data, nutritional variables and HIV related health were collected.

There were approximately 100 client records with only 40 completed and thus entered into the study (male= 19, female 21). Mean (\pm SD) age was 33.2 (\pm 14.1) years. Most of them were married (55%) and graduated secondary school (35%). Mean (\pm SD) body mass index (BMI) was 20.3 (\pm 2.55) kg/m² and not significantly different between gender. Mean (\pm SD) percent body fat was 18.9 (\pm 6.7) in males and 25.1 (\pm 7.8) in females ($p=0.021$) which were in normal ranges. Prevalence of underweight (BMI < 18.5) was 10.5% and overweight and obesity (BMI \geq 25) was 34.2%. Mean (\pm SD) total calories intake was 2145 (\pm 599) kcal and median (IQR) of percent energy requirement was 102.5 (76.2, 138.7). WHO clinical stage 1, 2, 3 and 4 were found in 10.5%, 18.4%, 36.8% and 34.2%, respectively. Thirty five people (87.5%) are currently receiving ART. Median (IQR) ARV duration and CD4 count were 1.09 (0.19, 2.88) year and 255 (152, 359) cells/mm³, respectively. Twelve (33.3%) and 14 (38.9%) of all patient had CD4 < 200 and 200-500 cells/mm³, respectively. There were no significant difference of dietary intakes and CD4 level between male and female.

Although the majority of HIV-infected clients attending the Champasak HIV and Nutrition Clinic were generally healthy and had adequate calories intake, underweight, similarly overweight/obesity, presented commonly. Integrating nutrition services into the comprehensive HIV care, support and treatment services could provide early identification and appropriate management of those at risk for abnormal nutritional status and advanced HIV diseases.

POSTER NUMBER:
PAPER NUMBER: 640

**THE USE OF PHOTO NARRATIVE
AS METHOD FOR SELF-
EXPRESSION OF PEOPLE LIVING
WITH HIV/AIDS: A CASE STUDY
OF A CARE CENTRE IN THE
EASTERN HIGHLANDS PROVINCE
OF PAPUA NEW GUINEA**

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The number of people living with HIV is rapidly increasing in Papua New Guinea (PNG). PNG has suffered the worst hit by the epidemic in the Pacific region. Infections have been increasing at approximately 30% per year since 1997. The cultural and linguistic diversity of the country makes it difficult to formulate appropriate messages about the virus for the multiple and disparate communities. Most of these communities are rural and have illiteracy rates of over 50%. Lack of knowledge and continued discrimination towards those living with HIV are common.

This paper investigates the use of photo narrative as a process of creative expression for people living with HIV or AIDS. By giving cameras to a group of PLWHA, individuals were able to document their feelings, reactions and daily challenges in making sense of other people's perceptions about them. As a result, PLWHA were able to find a new dynamic space for both individual expression and for community participation.

The exhibition of the photographs produced provided a powerful tool to raise awareness among PNG communities. Photographs paired with written stories proved capable of shifting perceptions of an audience, who were able to gain an understanding of people's feelings and their difficulties in living with HIV or AIDS. The visual expression serves as a tool to stimulate empathetic reactions and reduce stigma and discrimination in PNG.



**THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV****ADHERENCE**

In this presentation we report on outcomes of a nutrition support program implemented by the Victorian AIDS Council's Community Volunteer Support Services (VAC CVSS) in partnership with the Royal District Nursing Service (RDNS) HIV Program in Melbourne, Australia.

Staff of CVSS and RDNS identified an increasing number of clients living with HIV who experience social isolation and inadequate nutrition resulting from a range of health and socioeconomic factors. These include the impacts of living with a long-term illness, poverty, mobility issues, cultural background, refugee status, cognitive impairment and mental illness, especially severe depression. Many clients do not eat well, compromising their health and well-being. Most are unskilled in food preparation and unable to plan or cook nutritious meals on a regular basis. Inadequate nutrition has a well-known association with increasing morbidity and mortality in people living with HIV.

A pilot project aimed at addressing these concerns was developed with three service arms: food deliveries, nutrition support and cooking assistance to clients who are geographically or physically unable to access existing services. The nutrition support component is limited to the pilot project and has been funded by a grant from the Gay & Lesbian Organisation of Business & Enterprise. A range of simple recipes was selected by the RDNS HIV Team Clinical Nurse Consultants, CVSS staff and volunteers in consultation with an accredited practising dietitian. Clients will be able to choose two recipes each fortnight and have most of the ingredients delivered by volunteer drivers. Other volunteers will work with clients who require cooking assistance. Outcomes measures will assess changes to socialisation and nutritional security.

Fifteen clients have been recruited for the project, which will be evaluated with the assistance of medical students from Monash University as a Health Promotion project. Evaluation will include analysing the inputs (roles of volunteers, partnership between the RDNS and VAC programs, medical students, funding), the activities (provision of healthy recipes and ingredients, visits to clients) and how these contribute to the desired outcomes. Findings will be presented to demonstrate the impact of this pilot project on social determinants of health affecting people living with HIV.

POSTER NUMBER:
PAPER NUMBER: 582

**HIV NUTRITION SUPPORT
PROJECT – ADDRESSING
FOOD SECURITY AND SOCIAL
ISOLATION IN THE COMMUNITY**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

ADHERENCE

POSTER NUMBER:
PAPER NUMBER: 109

**SUPPORTING PSYCHO SOCIAL
ECONOMY WITH THE GIPA/
GMPUD SPIRIT AT RUMAH
CEMARA**

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Cemara: Bandung, West Java,
Indonesia

Rumah Cemara is a community-based organization established in 2003 by five recovering addicts with the vision of a positive and safe community for recovering addicts and people living with HIV/AIDS (PLWHA). Rumah Cemara employs principles of Greater Involvement of People with HIV/AIDS (GIPA) and of People who Use Drugs (GMPUD), in West Java, where PLWHA and PUD have become pioneers in HIV/AIDS and drug abuse prevention.

Rumah Cemara employs GIPA and GMPUD principles in both organizational Divisions: (1) The Peer Services Division includes a Treatment Center supporting drug addiction recovery, an HIV/AIDS Care sub-division to manage needs of PLWHA through individual and group interventions, and a Harm Reduction sub-division to decrease drug-related risk of HIV infection. (2) The Resource Mobilisation Division generates income for Rumah Cemara through a Business Unit and builds community support through public relations campaigns, all of which are managed by PLWHA and PUD.

PWHA and PUD presently manage the following positions, and have achieved the following results in West Java:

- 2 Program Managers: Peer Services Division and Resource Mobilization Division; 1 Public Relations Staff; and 7 Business Unit Staff.
- 1 Program Coordinator and 4 clinical staff run the Treatment Center at which 214 addicts have finished the program.
- 1 Program Coordinator and 4 staff run the HIV/AIDS Care sub-division serving 1.512 PLWHA.
- 2 Program Coordinators and 12 Harm Reduction Workers reach 2.240 injecting drug users and 3.256 prisoners, 214 female sex workers and 959 clients of sex workers.
- 1 Executive Director and 1 Vice Director contribute to policy-making at the National AIDS Commission and the National Narcotics Board, locally and nationally.
- From 36 staff, 32 (89%) are PLWHA and 33 (92%) are recovering addicts.

Rumah Cemara recognizes the quality and capacity of PLWHA and PUD in developing a stronger psycho-social economy, and has found success in employing GIPA and GMPUD principles that allow PUD and PLWHA to become active pioneers in delivering care, not just remain as objects of a program.

**THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV****ADHERENCE**

The increasing complexity of HIV management in relation to non-HIV co-morbidities, Serious Non AIDS Events and the ageing HIV population prompted a pilot project with the aim of developing a model of HIV management by:

Developing an audit tool to assess levels of health monitoring & screening
Applying that tool within a pilot setting
Developing clinical guidelines and referral pathways based on the audit

The initial phase of the project assessed the level of health management that patients received as part of routine screening and monitoring within a pilot area involving the Infectious Diseases Unit at the Royal Brisbane & Women's Hospital, AIDS Medical Unit and Brisbane Sexual Health Clinic. This involved reviewing blood results and patient medical records for those who attended these clinics during the 2008 calendar year.

The Steering Committee developed a two page Data Collection Tool that identified assessments as either "Ever Done" and "Annual".

A total of 160 patients were audited, 82 were female and 78 were male. This sample included all females and 10% of the male patients attending these clinics.

Achievements, identified as investigations or medical notes documented greater than 80% of the time, were: alcohol and recreational drug use, public health discussion (ever), current HAART, use of non HIV drugs, smoking status, weight, blood pressure, serology for toxoplasmosis, Hepatitis A, B and C, syphilis and blood sugar level.

Challenges (i.e. less than 80% recorded) with documentation were: public health discussion documented in 2008, height, cardiovascular risk calculation, waist circumference, urine protein tested, fasting blood sugar level, lipids, testing for chlamydia and gonorrhoea, Mantoux, PAP smear, genotypic resistance assay prior to treatment and Hepatitis A, B, Pneumovax and influenza vaccination.

As an immediate response "Annual" and "Ever Done" reminder stickers have been developed. These will be placed in the patient's progress notes to increase the level of documentation. In the long term, a HIV Care Plan and clinical algorithms to guide management will be developed. Charts will be re-audited to evaluate the effectiveness of the stickers.

POSTER NUMBER:
PAPER NUMBER: 342

**HIV PATHWAYS PROJECT 2009 –
A QUEENSLAND MODEL FOR CO-
ORDINATED CARE**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

CO-MORBIDITY

POSTER NUMBER:
PAPER NUMBER: 406

**INVESTIGATION OF LIVER
FUNCTION ABNORMALITIES IN
HIV MONO-INFECTED PATIENTS**

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Introduction

Unexplained liver enzyme elevation has been observed among patients with human immunodeficiency virus (HIV) in the absence of viral hepatitis, but associations between hepatic inflammation and HIV are poorly understood.

Aim

To describe the aetiology of liver function abnormalities among HIV mono-infected patients.

Methods

A cross-sectional study was performed of all patients seen at an HIV quaternary referral centre. Patients were included if they had HIV with no evidence of Hepatitis B or C co-infection, had attended the hospital in the past year, and had persistently elevated ALT >30 IU/L in men and >19 IU/L in women, measured twice ≥3 months apart. All patients had standardized data collected on demographics, height, weight, HIV monitoring and therapy, lipids, glucose, radiology and tests for toxic, viral, hereditary or autoimmune causes of liver disease where available.

Results

1203 patients with chronic HIV were seen at least once within 12 months, of whom 1018 were Hepatitis B or C seronegative. Among 223 patients (89% male, n=198) who met study criteria, at study entry the median age was 48.3 years (interquartile range (IQR) 41.3 - 55.0 years), HIV was diagnosed 11.9 years prior (IQR 5.8 - 18.1 years), CD4 count was 378 cells/ul (IQR 235-570) and HIV viral load was undetectable (IQR <50 to 17680 copies/ml). The median ALT was 44 IU/l (IQR 36 - 60) but was higher in men than with women (median 56 v 32 IU/L). There was an elevated body mass index (BMI) in 75% (median BMI 26.5, IQR 25.0 - 30.2). Exposure to antiviral therapy associated with liver disease was frequent; stavudine 60% (n=133), didanosine 50% (n=112) and nevirapine 65% (n=145).

Conclusions

Several factors were identified as potential contributors to hepatic inflammation, particularly age, male gender, medication exposure and elevated BMI. Prospective follow up in this cohort is necessary to identify what if any of these factors predict progression to chronic liver disease.

**THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV****CO-MORBIDITY**

A 37 year-old Australian-born man who described high-risk sexual exposures had been diagnosed recently with an acute HIV seroconversion illness and concurrent urethral Chlamydia infection. He had multiple tattoos and body piercings, but reported no intravenous drug use. Baseline Hepatitis B and C (HCV) serology was negative.

Two months later, he presented to hospital with progressive, symmetrical ascending leg weakness with only mild impairment of respiratory and bulbar musculature. He had no jaundice, itch or abdominal pain. On examination, he was areflexic with predominantly distal leg weakness, and some subjective sensory loss.

At time of hospitalization, his CD4 cell count was 470/ul (30%) with a viral load of 88,000 copies/ml. Liver function tests revealed a hepatic picture with alanine transaminase (ALT) 1300 IU/L, bilirubin 30 umol/L, and INR 1.0. Lumbar puncture and nerve conduction studies were consistent with an acute inflammatory demyelinating polyradiculoneuropathy. HCV antibody was positive and HCV RNA was detectable by PCR. No other aetiology for the abnormal liver enzymes was identified after additional tests for toxins, hereditary and autoimmune conditions.

His neuropathy improved after treatment with IV gammaglobulin and methylprednisolone. His ALT improved without directed therapy during his hospitalization. He has not yet been commenced on antiretroviral therapy.

The major management issues for this patient include i) timing of initiation of antiretroviral therapy in the context of acute HIV infection and a severe neurological complication requiring immunosuppressive therapy, and ii) whether to treat HCV in the acute period. The case also highlights the risk of sexual transmission of HCV in the setting of high-risk sexual practices and concurrent sexually transmitted infections.

Introduction: Metabolic syndrome (MS) is a group of risk factors for cardiovascular diseases (CVD) and type2 diabetes. HIV infection itself and the use of highly active anti-retroviral therapy (HAART) are associated with these risk factors. With the increasing life expectancy of HIV-infected patients, many countries are now facing problems of how to best screen HIV-infected patients and manage these risk factors to prevent unnecessary morbidities and mortalities related to CVD.

Methods: MS was defined as having ≥ 3 of the following 5 components: abdominal obesity (men ≥ 90 cm, women ≥ 80 cm), hypertriglyceridemia (≥ 150 mg/dl), low HDL (men < 40 mg/dl, women < 50 mg/dl), high blood pressure ($\geq 130/85$ mmHg), and high fasting plasma glucose (FPG ≥ 100 mg/dl). Patients, aged ≥ 18 years, visited MTCT-Plus outpatient clinic during 1 January-31 December 2008 were eligible for the study if they were screened for all 5 components. Patients who were referred to nutritionists/dieticians also had detailed diet and exercise data collection.

Results: Among 206 patients included, 50(24.3%) were men and 168(81.6%) were on HAART(74.8% on NNRTI-based regimens). Mean age was 34.1 years. High BMI (≥ 23 kg/m²) was found in 38.3%. Among 156 women, 46.8% had abdominal obesity, 30.1% had low HDL, 17.9% had hypertriglyceridemia, 4.5% had high blood pressure, and 7.1% had FPG. The numbers were 18.0%, 28.0%, 48%, 28%, and 16%, respectively for men. The prevalence of MS was 8.7% but 31.1% had ≥ 2 features of MS. Being male, older age, high CD4 count, low HDL, increased waist circumference, and high BMI were significant risk factors for MS by univariate analysis. Only CD4 ≥ 350 cell/mm³ (OR=4.4 [95%CI 0.8-24.2], P=0.05), HDL < 45 mg/dl (OR=6.4[95%CI=2.0-20.6], P<0.01), and BMI ≥ 23 kg/m² (OR=6.2 [95%CI=1.7-22.1], P<0.01) remained significant after adjustment. Among 48 patients with available data on diet and exercise, high fat intake was the only significant risk factor for having ≥ 2 features of MS by univariate analysis (OR=4.7[95%CI=0.9-24.9], P=0.04). We could not identify any diet or exercise risk factors for MS.

Conclusions: The prevalence of MS in Thai HIV-infected patients was not higher than general population. However, around 1/3 had ≥ 2 features of MS. Efforts should be made to screen HIV-infected patients who are at high risk for MS and early interventions should be given to prevent or modify the long-term morbidities and mortalities.

POSTER NUMBER:
PAPER NUMBER: 408

**NEWLY DIAGNOSED HIV
SEROCONVERSION AND ACUTE
HEPATITIS C**

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POSTER NUMBER:
PAPER NUMBER: 198

**THE PREVALENCE OF METABOLIC
SYNDROME AMONG THAI HIV-
INFECTED PATIENTS IN MTCT-
PLUS OUTPATIENT CLINIC USING
AMERICAN HEART ASSOCIATION
(AHA) AND NATIONAL HEART
LUNG AND BLOOD INSTITUTE
(NHLBI) CRITERIA**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

CO-MORBIDITY

POSTER NUMBER:
PAPER NUMBER: 497

VITAMIN D DEFICIENCY IS PREVALENT AMONGST HIV PATIENTS ATTENDING FREMANTLE HOSPITAL, AND INCREASED SKIN PIGMENTATION IS A MAJOR RISK FACTOR.

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Several studies have identified a large incidence of vitamin D deficiency amongst cohorts of patients living with HIV. Given that Perth has 3,200 hours of sunshine annually, and the likely benefit that should bestow on vitamin D metabolism to individuals living here, we wanted to determine whether our cohort of HIV positive patients attending Fremantle Hospital had similar high rates.

We performed a retrospective assessment of levels of 25-hydroxyvitamin D (25 (OH) D) amongst HIV patients seen at Fremantle Hospital. Those with levels below 50nmol/L were identified and further stratified to mild, moderate and severe deficiency. Demographic data was recorded for each patient.

Of 88 patients, 30 had levels of 25 (OH) D below 50nmol/L. In multivariate analysis, a significant association was found between increased skin (as determined by ethnicity) and low levels of 25 (OH) D.

POSTER NUMBER:
PAPER NUMBER: 182

INTERFERON- γ AND IL-5 PRODUCTION CORRELATE DIRECTLY IN HIV PATIENTS CO-INFECTED WITH MYCOBACTERIUM TUBERCULOSIS WITH OR WITHOUT IMMUNE RESTORATION DISEASE

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Introduction: IL-5 and interferon- γ responses were investigated in mitogen and purified protein derivative (PPD)-stimulated whole-blood cultures from HIV patients with and without Mycobacterium tuberculosis disease, to determine whether an imbalance of Th1/Th2 cytokines contributes to susceptibility to M. tuberculosis disease or to immune restoration disease associated with M. tuberculosis (TB-IRD) after starting antiretroviral therapy (ART).

Methods: Plasma was obtained from Quantiferon-TB Gold™ in-tube assays (Cellestis, Carnegie, Australia) undertaken before and at 4, 12 and 24 weeks of ART in 306 ART-naïve HIV-1 patients. Seventy five patients had treated TB upon starting ART, of whom fifteen experienced a form of TB-IRD known as tuberculosis-associated immune reconstitution inflammatory syndrome (TB-IRIS). Eleven patients with no history of TB were diagnosed with a second form of TB-IRD, ART-associated tuberculosis (ART-TB), after starting ART. Each TB-IRIS and ART-TB case was matched with two controls by sex, pre-ART CD4⁺ T cell count and TB history. Levels of IFN- γ and IL-5 were assayed in plasma from whole blood cultured with phytohaemagglutinin (PHA) or PPD.

Results: IL-5 levels were undetectable in PPD-stimulated samples (<2.7pg/ml) within TB-IRIS and ART-TB cases and controls. In PHA-stimulated samples, IL-5 levels rose significantly in TB-IRIS controls after the commencement of ART relative to baseline (for week 0 vs 4, p<0.05; for week 0 vs 12, p<0.05; for week 0 vs 24, p<0.01), while levels remained low in TB-IRIS cases before and during 12 weeks of ART. Following PHA-stimulation, levels of IFN- γ did not change significantly relative to baseline in TB-IRIS cases or their controls during ART. IL-5 levels generally rose in ART-TB cases and controls after the commencement of ART while levels of IFN- γ remained constant in ART-TB cases or controls. IFN- γ levels correlated directly with IL-5 following PHA-stimulation in all groups studied, but correlations were weak in the ART-TB cases.

Conclusions: We suggest that increased IL-5 production reflects a recovery of CD4⁺ T cell function and that a Th1/Th2 imbalance is not associated with increased susceptibility to M. tuberculosis disease or IRD associated with M. tuberculosis upon starting ART.

**THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV****CO-MORBIDITY**

People with HIV and hepatitis C virus (HCV) co-infection commonly develop elevations in hepatic transaminase enzymes after commencing combination antiretroviral therapy (cART). It is unclear if this is due to drug toxicity, alterations in HCV-specific or non-HCV-specific immune function, or other factors.

We followed 12 subjects with HCV HIV co-infection at 0, 2, 4, 8, 12 and 24 weeks after cART commencement. Subjects were designated as having a flare if the ALT level doubled from baseline at any stage in the follow-up period and non-flare if the ALT did not double. Immune responses were assessed in an IFNg ELISpot assay with PBMC stimulated by (1) 10 peptide pools covering the HCV genome, divided into structural and non-structural (NS) genes (2) a peptide pool of Cytomegalovirus, Epstein-Barr virus and Influenza virus (CEF) and (3) HIV gag peptides. Plasma levels of cytokines/chemokines (sCD30, sCD26, neopterin, ITAC, IL-2, IL-6, IL-8, IL-10, IL12-p70, TNFa, TNFB, IL-18, IFNg, IP-10, MCP-1 RANTES, MIP-1a, MIG, TRAIL) were measured by ELISA. The Abbott Architect® HCV antibody sample to cut-off ratio (S/CO) was measured. Differences between the groups were assessed by a Kruskal-Wallis test.

Five 'flare' subjects and 7 'non-flare' subjects were studied. The groups were similar at baseline in age, ALT level, HIV and HCV viral loads, CD4 count and percent, and IFNg ELISpot responses. The flare group had higher IFNg ELISpot responses after week 12 of cART against HCV antigens: NS3 (p=0.001), NS4b (p=0.011), NS5a (p=0.012), NS5b (p=0.042); and CEF (p=0.041). The HCV antibody level was consistently higher in flare subjects (Kruskal-Wallis p=0.004) and showed a trend towards correlation with ALT levels (Spearman r=0.4, p=0.06).

These findings suggest enhancement of cellular immunity both against HCV and other antigens may be linked to hepatitis flares in HIV-HCV coinfecting subjects with commencement of cART. Further investigation in a larger sample is needed to confirm these findings.

POSTER NUMBER:
PAPER NUMBER: 359

**ALTERATIONS IN IMMUNE
FUNCTION AND ASSOCIATION
OF ANTI-HCV SPECIFIC
IMMUNE RESPONSES WITH
ELEVATIONS IN ALANINE
AMINOTRANSFERASE
LEVELS IN PEOPLE WITH
HIV AND HCV COINFECTION
AFTER COMMENCEMENT
OF COMBINATION
ANTIRETROVIRAL THERAPY**

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

CO-MORBIDITY

POSTER NUMBER:
PAPER NUMBER: 707

DO STATINS REDUCE THE RISK OF FRACTURE IN PEOPLE WITH HIV?

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Osteoporosis in HIV-infected patients may in part be the result of chronic immune activation and inflammation. Statin therapy, in addition to a lipid-lowering effect, has diverse immunological effects and is associated with decreased bone resorption. We conducted a retrospective study of low trauma fractures in an HIV-infected population in order to determine whether statins were associated with reduced fracture risk.

A 1:2 matched case control study was performed of HIV-infected patients with low trauma fracture attending the Alfred Hospital between 1998-2009. Controls were matched for gender, age (± 5 years) and duration of known HIV infection (± 2 years). Multivariate analyses were performed using conditional logistic regression.

Sixty-one patients with 73 documented fractures were identified with an average age of 49.8 years. Patients were predominantly male (88%), Caucasian (92%) and had been diagnosed with HIV for a mean of 11 years. Nineteen percent of the study population received statin therapy. In univariate analysis, CD4 count $< 200/\mu\text{l}$ was significantly associated with risk of fracture OR 6.77 ($p < 0.01$), but a similar association was not seen with detectable viremia ($p = 0.18$). Risk of fracture was also significantly associated with concurrent use of statins (OR 0.30; 95% CI: 0.10 to 0.94, $p < 0.04$), proton pump inhibitors (OR 2.93; 95% CI: 1.20 to 7.15, $p < 0.02$), corticosteroids (OR 5.3; 95% CI: 1.41 to 20.1, $p < 0.01$) and anti-epileptic medications (OR 9.57; 95% CI: 2.10 to 43.6, $p < 0.01$). There were no significant association between use or class of antiretroviral medications and risk of fracture. In a multivariate analysis, CD4 count, use of corticosteroid and antiepileptic therapy remained significant. This study is the largest series describing the occurrence of low trauma fractures in HIV patients to date. Risk of fracture in this HIV population was associated with low CD4 count and use of corticosteroid or anti-epileptic medication. Larger clinical studies would be useful in determining the effect of statin therapy on fracture risk in HIV patients.



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

Following the observation of repeated positive rectal Chlamydia PCR tests after single dose Azithromycin in several asymptomatic patients, an audit of the investigation and management of Chlamydia was recommended. It is recognised that up to 90% of chlamydial infections are asymptomatic, including rectal infections. 1g oral Azithromycin stat is the recommended treatment for Chlamydia. The Sexually Transmissible Infections in Gay Men Action Group (STIGMA) recommend a test of re-infection at 3 months.

Objectives of the audit

To audit the uptake of tests for re-infection and determine how many repeatedly positive Chlamydia samples were tested for Lymphogranuloma Venereum (LGV). To describe presumed treatment failure with 1g Azithromycin and to review the use of the Sexually Transmitted Infection (STI) Treatment Tool.

Methods

A retrospective review of patients' medical records, the electronic HIV database and microbiology records over a two year period from April 2008.

Results

A total of 1,683 Chlamydia tests were performed between April 2008 and April 2010. 668 (39.69%) were rectal specimens. Of these, 46 (6.89%) were positive for rectal Chlamydia in 35 (5.24%) men. 18/35 (51.43%) were documented to be asymptomatic at testing. 26/35 (74.28%) men had tests for re-infection. These were generally performed 12 weeks after treatment. Six men (17.14%) had repeatedly positive Chlamydia detected on rectal swabs, of which 4 were treated for LGV. Those with documented LGV infection were symptomatic. Four had been treated with Azithromycin as a first line treatment and required doxycycline for second course. They were documented as having had their contacts treated.

Conclusion

This audit highlights a significant rate of 17.14% positive tests of re-infection in this group. 66.67% of these men were treated with Azithromycin. The possibility of treatment failure rather than re-infection should be considered in both symptomatic and asymptomatic men as this has implications for choice of antibiotic for the second positive test, as well as consideration of testing for LGV.

A growing focus within the HIV positive community on aging as well as on cognitive impairment has further highlighted clinical practice issues as to how to identify patients with possible early HIV-associated neurocognitive disorder (HAND). While moderate and later symptoms of dementia are likely to be more easily recognised, there is often uncertainty, and for some scepticism, as to the existence of early HAND in patients who might report quite subtle changes. As a potentially treatable condition, familiarity with the typical complaints in early HAND is important. The possible presenting complaints in early HAND will be highlighted from a clinical perspective and also considered in relation to possible co-existing factors such as Hepatitis C, depression, alcohol use, and crystal methamphetamine use.

POSTER NUMBER:
PAPER NUMBER: 559

THE TREATMENT & MANAGEMENT OF RECTAL CHLAMYDIA IN HIV+ MEN IN AN INFECTIOUS DISEASES OUTPATIENT DEPARTMENT.

Airth L, Johnson K, Bowtell-Harris C, Watson K, Hoy J

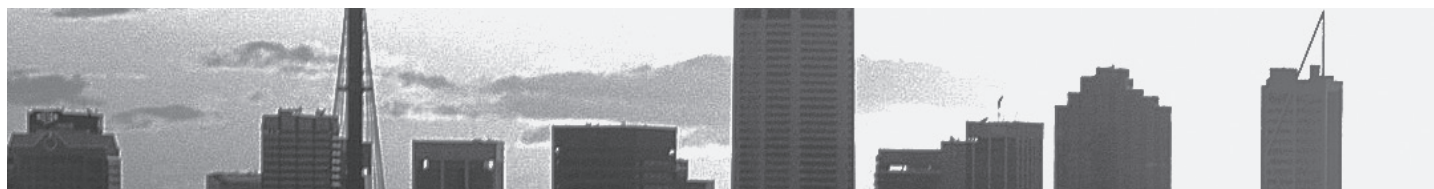
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POSTER NUMBER:
PAPER NUMBER: 729

RECOGNISING COMPLAINTS OF EARLY HIV-ASSOCIATED NEUROCOGNITIVE DISORDER IN CLINICAL PRACTICE AND CONSIDERATION OF ADDITIONAL RISK FACTORS ON COGNITIVE IMPAIRMENT.

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

POSTER NUMBER:
PAPER NUMBER: 204

**GENOTYPIC ANTIRETROVIRAL
RESISTANCE TESTING
(GART) ASSISTED HUMAN
IMMUNODEFICIENCY VIRUS
(HIV) TREATMENT VERSUS
CLINICAL JUDGEMENT ALONE: A
COST-EFFECTIVENESS ANALYSIS**

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Although the prevalence and mortality rate of HIV has stabilised in Australia and around the world, it remains a health issue of concern and optimising treatment is imperative. Genotype-assisted antiretroviral resistance testing (GART) is a blood assay used to detect mutations that are known to confer resistance to specific antiretroviral drugs by sequencing the protease and reverse transcriptase regions of the human immunodeficiency virus-1 (HIV-1) genome. GART aims to accurately identify the presence of mutations that confer resistance to inform selection of targeted treatments for people with HIV. There is evidence that GART-guided therapy improves patient outcomes better than treatment guided solely by clinical judgement, but little data exists assessing the cost-effectiveness of GART in the Australian context.

A Markov model with Monte Carlo simulations was constructed to establish the incremental cost-effectiveness in Australia of GART-assisted HIV treatment versus therapies determined by clinical judgement alone, which is mainly informed by increasing HIV viral load in the presence of antiretroviral therapy (treatment failure). The model's primary health states were based on HIV treatment regimens, HIV-related death and death due to natural causes. The analysis was conducted over a patient's entire life span.

GART-guided highly active antiretroviral therapy (HAART) was found to be more effective and less costly (the dominant strategy) compared to treatment guided by clinical judgement alone. Compared with treatment strategies guided by clinical judgement alone, GART-guided HAART resulted in an average cost saving of \$3043 per person and an increase of 0.005 quality adjusted life years (QALYs) per person over the patient's entire life span. GART-guided HAART remained the dominant (less costly and more effective) strategy compared with HAART guided by clinical judgement alone, despite extensive sensitivity analyses with respect to various key input variables.

HAART with GART is less costly than HAART without GART.

POSTER NUMBER:
PAPER NUMBER: 184

**LATENT TUBERCULOSIS
SCREENING USING
INTERFERON-GAMMA RELEASE
ASSAY; A DESCRIPTIVE STUDY,
CAIRNS SEXUAL HEALTH
SERVICE**

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Base-line screening for latent tuberculosis infection (LTBI) is recommended for HIV positive clients, however, no gold standard test is available. The tuberculin skin test (TST) has been used to diagnose LTBI for over a century but has a number of limitations. The development of whole blood gamma interferon release assays (IGRAs) has provided an alternative test that has considerable practical advantages over the TST. Since May 2009, all HIV positive clients attending the Cairns Sexual Health Service have been offered LTBI screening using the Quantiferon Gold test kit. Of the 191 clients screened so far, 13 (6.8%) have tested positive. Updated data, including risk factors and management will be presented.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

Drug resistance occurs in some form in approximately 10% of patients within two years of initiating first line combination antiretroviral therapy (cART). Development of resistance is associated with increased mortality. Identifying key mutations that may limit the efficacy of subsequent regimens is essential for clinical management of these patients.

The ALTAIR Study is a Phase IIIb/IV, randomised, open-label study in ART-naïve patients comparing safety, tolerability and efficacy of three regimens of cART based upon a fixed dose combination of tenofovir/emtricitabine either with efavirenz (Arm I), atazanavir/r (Arm II) or zidovudine plus abacavir (Arm III). The study recently completed 96 weeks follow-up at 36 sites in 15 countries. Genotypic HIV drug resistance testing was conducted locally after virological failure (VF), defined in this analysis as plasma HIV-RNA >400 copies/mL after achieving HIV-RNA ≤400 copies/mL, or failure to achieve a confirmed HIV-RNA ≤400 copies/mL by week 24. Tests results were assessed using the most current version of the International AIDS Society-USA guidelines.

Over 96 weeks, there were 32/322 (9.9%) participants with VF. Of these participants, n=7 (22%) were in Arm I, n=4 (12%) in Arm II and n=21 (66%) in Arm III. The majority of VF were reported from Latin America (12%), followed by Asia (10%), Europe (8%) and Australia (6%). Genotypic data were available for virus isolates from 15 participants with VF. Seven isolates had no HIV drug resistance mutation detected. Further 7 isolates had HIV with nucleoside reverse transcriptase inhibitors (N(t) RTI) mutations; M184I/V was the most common, occurring in 5 participants (1, 1, 3 in Arms I, II and III, respectively). In addition, one participant (Arm III) developed K65R mutation in combination with minor PI mutations. NNRTI resistance was detected in 1/15 participants (Arm I). The per arm proportions of the overall resistance detected were 2/8 in Arm I, 2/8 in Arm II and 4/8 in Arm III.

Treatment failure in the ALTAIR Study after two years is low and approximately half of VF reported was not associated with resistance. More resistance mutations appear in Arm III, consistent with the overall poor performance of this arm.

We developed an algorithm for the management of proteinuria in patients with HIV. The aim of the audit was to determine the prevalence of proteinuria in our 640 patient cohort and to measure adherence to our clinical algorithm.

All patients were to have an annual urine analysis (UA); urinary protein:creatinine ratio (UPCR) and urinary albumin:creatinine ratio (UACR) were to be performed only in those with more than a trace of protein (>trpn) detected on UA; tenofovir cessation was to be considered in patients with unexplained proteinuria. UA was to be repeated in 12 months in patients with normal UA. 37% of the entire clinic population were randomly selected. A threshold of 80% was predetermined as an acceptable level of compliance with the algorithm.

The medical records of 236 patients were reviewed. 79% of patients had a urine analysis during observation period. 41 patients had >trpn on UA. 93% (N=37) of these patients had urine sent for UPCR and 55% had UACR. 23/37 (62%) of these patients had an elevated UPCR. Therefore approximately 10% (23/236) of patients in the entire cohort had proteinuria. The cause of proteinuria was not obvious in 22 patients. 17/22 of the patients with an increased UPCR were taking tenofovir. Cessation of tenofovir was considered in 82% of these patients. 7 ceased tenofovir while 7 continued tenofovir. 80% of patients with a normal urine analysis had it repeated within 12 months.

10% of patients had proteinuria. Adequate adherence to the algorithm was documented for annual UA; UPCR estimation in patients with > trpn on UA; consideration of tenofovir cessation in patients with unexplained proteinuria and repeating UA in those with normal UA at baseline. Poor adherence was documented for UACR estimation.

POSTER NUMBER:
PAPER NUMBER: 513

HIV DRUG RESISTANCE THROUGH 96 WEEKS AMONG TREATMENT-NAÏVE PATIENTS RANDOMISED TO THREE DIFFERENT COMBINATION ANTIRETROVIRAL REGIMENS IN THE ALTAIR STUDY

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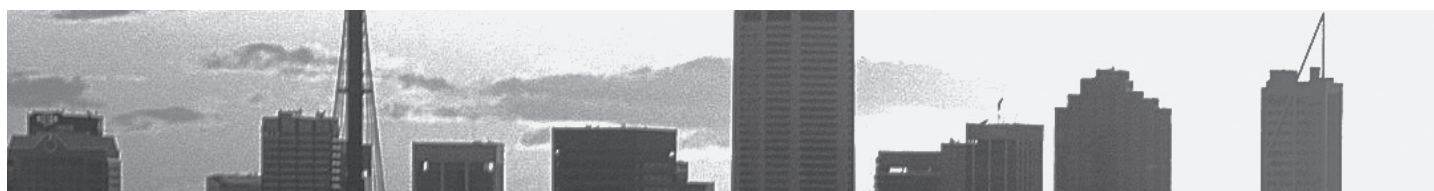
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POSTER NUMBER:
PAPER NUMBER: 752

AUDIT OF A CLINICAL ALGORITHM FOR THE MANAGEMENT OF PROTEINURIA IN PATIENTS WITH HIV

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

POSTER NUMBER:
PAPER NUMBER: 562

**CHRONIC PARVOVIRUS B19
INFECTION REFRACTORY
TO INTRAVENOUS
IMMUNOGLOBULIN TREATMENT
IN AN AIDS PATIENT**

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A male AIDS patient who had persistent anemia was found to have chronic parvovirus B19 infection. He remained transfusion-dependent after standard intravenous immunoglobulin (IVIg) treatment for two courses 6 months apart. The failure resulted from only a one log₁₀ decrease in B19 viral load on day 11 after IVIg treatment. After successful combination anti-retroviral therapy for 12 months, his anemia remitted spontaneously. Serological study showed that anti-VP2 was reconstituted four months before the resolution of anemia and the appearance of anti-VP1.

POSTER NUMBER:
PAPER NUMBER: 279

**DOES USE OF ANTIRETROVIRAL
THERAPY REGIMENS WITH HIGH
CENTRAL NERVOUS SYSTEM
PENETRATION IMPROVE
SURVIVAL IN HIV-INFECTED
ADULTS?**

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To determine whether combination antiretroviral therapy (cART) using regimens with high central nervous system penetration-effectiveness (CPE) rank (neurocART) is associated with increased survival benefit compared to cART without high CPE rank (non-neurocART).

Prospective data were examined from 6,003 HIV-positive participants from the Australian HIV Observational Database and the TREAT Asia HIV Observational Database who had commenced cART. CPE rank was calculated using the 2010 rankings process (Poster No.430: CROI, 2010 San Francisco). NeurocART status was assigned to those regimens with a CPE rank of ≥ 8 . Survival was analysed in participants according to neurocART status using Cox-proportional hazards models with covariates updated at instances of change in cART regimen and with deaths up to 90 days after regimen cessation. Sensitivity analyses were conducted to examine robustness of analysis assumptions.

During median follow-up of 4.3 years, 308 deaths occurred (incidence rate of 11.8 deaths/1000 person-years). Survival models of neurocART use showed modest, but non-significant reductions in mean hazard of over 10%. The hazard ratio for neurocART regimen use was 0.89 ($p=0.35$) relative to non-neurocART use when stratified on cohort and adjusted for CD4 count (cells/ml), viral load (copies/ml), AIDS defining illness (ADI), hepatitis B and C virus, mode of HIV exposure and regimen count. This model showed strong associations between survival hazard and decreased CD4 count ('50-99' HR=0.44, '100-199' HR=0.22, '200-349' HR=0.18, ' ≥ 350 ' HR=0.32, and 'missing' HR=0.32, compared to ' <50 ', $p<0.001$), ADI present (HR=1.29, $p=0.05$), injecting drug use (HR=1.75 compared to homosexual, $p=0.02$), age ≥ 50 (HR=2.49 compared to age <30 , $p<0.01$) and regimen count of ' ≥ 4 ' (HR=2.02 compared to 1st regimen, $p<0.001$).

Sensitivity analyses showed similar non-significant results, including a modest survival benefit when initial neurocART regimen was used instead of time-updated neurocART regimen (HR=0.92, $p=0.55$), and when the event of ADI or death was used as an endpoint instead of death (HR=0.92, $p=0.55$). All other sensitivity analyses showed limited survival benefit.

A modest, though non-significant association between neurocART use and survival was observed. This finding was shown to be robust to changes in model assumptions.



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

Introduction: Commencing antiretroviral therapy (ART) in HIV patients with treated or unrecognised *Mycobacterium tuberculosis* infection may result in tuberculosis-associated immune reconstitution inflammatory syndrome (TB-IRIS) or ART-associated tuberculosis (ART-TB), respectively. Both conditions appear to be forms of immune restoration disease but their immunopathogenesis is not completely understood.

Methods: Plasma from unstimulated Quantiferon-TB Gold™ in-tube assays were collected pre-ART and after 4, 12 and 24 weeks of ART in 306 Cambodian HIV-1 patients. Chemokines and cytokines produced by the innate immune system (CCL2, CXCL8, -9, -10 and IL-18) important in the immune response to *M. tuberculosis* were assayed in 15 TB-IRIS cases and 11 ART-TB cases. Each case was matched with two controls for sex, pre-ART CD4⁺ count and TB history.

Results: When compared to controls, levels of IL-18 and CXCL10 were higher in TB-IRIS cases over 24 weeks of ART ($P=0.002$ and 0.006 , respectively) while CCL2 levels were lower ($P=0.006$). IL-18 was higher in ART-TB cases ($P=0.002$) but CXCL10 was only marginally higher ($P=0.06$) compared to controls. When TB-IRIS cases were compared with ART-TB cases, IL-18 levels were higher in ART-TB cases ($P=0.03$), while CXCL10 levels were higher in TB-IRIS cases ($P=0.001$). Using receiver operating characteristic curves, pre-ART levels of CCL2, CXCL10, IL-18 were predictive of TB-IRIS and additive to IFN- γ responses.

Conclusions: Perturbations of the innate immune response to *M. tuberculosis* before and during ART may contribute to the immunopathology of TB-IRIS whereas elevated IL-18 alone suggests adaptive immune responses predominate in ART-TB. These findings may have implications for therapy in TB-IRIS.

POSTER NUMBER:
PAPER NUMBER: 181

MEDIATORS OF INNATE AND ADAPTIVE IMMUNE RESPONSES DIFFERENTIALLY AFFECT IMMUNE RESTORATION DISEASE ASSOCIATED WITH MYCOBACTERIUM TUBERCULOSIS IN HIV PATIENTS BEGINNING ART

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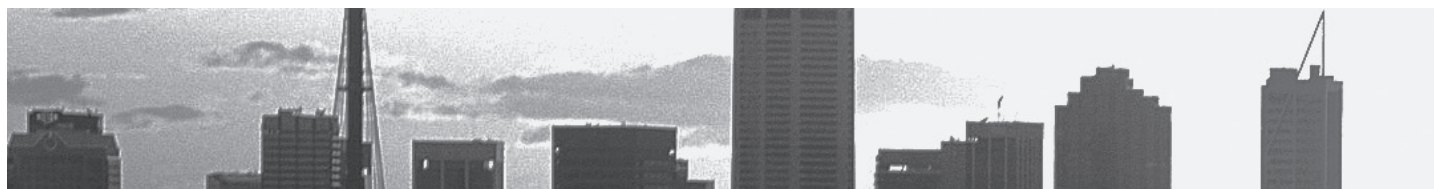
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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

POSTER NUMBER:
PAPER NUMBER: 331

**THE TREAT ASIA STUDIES
TO EVALUATE RESISTANCE
MONITORING STUDY (TASER-M) -
COHORT PROFILE**

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behalf of the TREAT Asia Studies to
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Introduction:

In Asia, HIV infection prevalence is over 5 million with incident cases ranging from 200,000 to 650,000. Improved regional access to antiretroviral therapy (ART) has not generally been accompanied by increased viral load or HIV drug resistance (HIVDR) testing. Without virologic or genotypic resistance monitoring, ART failure may be detected late facilitating acquisition of resistance mutations. Our study monitors patients for emerging HIVDR following initiation of first and secondline ART. TASER-M results contribute information for the development of evidence-based treatment guidelines.

Methods:

TREAT Asia (Therapeutics, Research, Education and AIDS Training in Asia) is a network of clinics, hospitals and research institutions throughout the Asia-Pacific. 84% of TREAT Asia collaborating sites are in either low (30%) or lower-middle income (54%) economies.

Using a prospective, multi-centre cohort design with sequential enrolment, ART-naïve and first-line experienced patients were recruited. Certified laboratories evaluated the nucleotide sequences of HIV protease (PR) and reverse transcriptase (RT) for mutations.

Results:

In March 2009, 7 sites (Thailand, Hong Kong, Malaysia) provided genotypic data for 718 naïve (96.5%) and experienced (3.5%) patients.

Naïve Patients: Median age 36.5 yrs, 65.5% male and 75% reported heterosexual HIV exposure. Median baseline HIV RNA=100,000 copies/ml and 48.6% of patients had pre-therapy CD4 counts<100cells/μL. Of first-line regimens, 85.6% were based on non-nucleoside RT inhibitors (NNRTIs), nevirapine (56%) more commonly prescribed than efavirenz (42%). 10.5% were protease inhibitor (PI)-based on ritonavir-boosted atazanavir (43%) or lopinavir (LPV) (41%). Predominant circulating recombinant forms (CRFs)/subtypes were CRF01_AE (79.9%) and subtype B (15.6%). For 20 (2.7%) patients, the subtype/CRF sequenced from PR and RT differed.

Experienced Patients: Median age 36.5 yrs, 64% female and 92% reported heterosexual HIV exposure. Median HIV RNA=10,680 copies/ml and median CD4 count was 197cells/μL. Failed first-line regimens were NNRTI-based (median duration=30.3 months). Second-line regimens were PI-based, with 88% including LPV. The most frequent NRTI backbone was tenofovir and zidovudine (36%). 84% were CRF01_AE.

Conclusions:

Overall, most patients were infected with CRF01_AE or subtype B. In 3% of patients, PR and RT subtypes differed, suggesting dual infection and potential for recombination. Monitoring recombination is important for evaluating regional HIV transmission. Viral heterogeneity may have implications for patient response to ART.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

The clinical presentation of primary human immunodeficiency virus (HIV), cytomegalovirus (CMV) and Epstein Barr virus (EBV) infections overlap and this may cause diagnostic uncertainty, with consequences for the individual and the community. Previous workers have demonstrated positive Monospot tests in acute HIV infection and positive EBV Capsid Antigen (EBVCA) IgM ELISAs and EBV nuclear antigen (EBVNA) IgM ELISAs in sera from patients with primary HIV infection.

We report three cases where false positive EBV or CMV IgM results lead to an incorrect diagnosis during primary HIV infection.

We also assessed the frequency of false-positive results that may incorrectly suggest infection with another pathogen in patients with primary HIV infection. Eighty four de-identified serum samples with a positive HIV p24 antigen (p24Ag) test and/or group 4 indeterminate HIV Western Blot assay were identified. Duplicate samples, samples taken for post-exposure screening in perinatally exposed children, patients with chronic HIV infection and possible false positive cases (no viral load or P24Ag result) were excluded. Sera were tested with the HIV BED assay to exclude non-acute HIV infections. Thirty five sera were tested for monospot reactivity and with the EBVCA IgM ELISA. Anti-EBVCA IgM positive samples were further tested using the EBVCA IgG ELISA, the EBVNA IgG ELISA and EBVCA IgG avidity assay. The anti-CMV antibody titre was measured with a complement fixation test and with an anti-CMV IgM ELISA. Positive samples were tested with an anti-CMV IgG ELISA and for CMV IgG avidity. Anti-CMV IgM or anti-EBV IgM-positive samples were tested with an in-house nested multiplex PCR assay for EBV and CMV.

The rate of reactive anti-CMV or anti-EBVCA IgM assays in sera from a group of subjects with primary HIV infection was 5.7% (2/35; 95% CI = 0.99%-20.5%).

Clinicians should consider that primary HIV infection may be associated with false positive herpes viridae IgM assays and testing for HIV infection should be considered in cases where this finding is made.

Issue

I am HIV-Hep C co infection patient with the number 38,000 of HIV viral load, 5,000,000 of HCV RNA quantitative, genotype 1, 614 of CD4 absolute, blood Hb 13 and body weight 71 kg. On February 2008 I take Pegylated Interferon alpha IIB and Ribavirin therapy by subcutaneous injections application. I got bad fever, headache, nausea and also depressed on my first injection. Fever and headache still continued until next injection on 7th day. Its condition getting worst, because I lost my appetite to eat. Pegylated Interferon dosage given by inject every 7 day and Ribavirin 5 capsules @200mg every single day, 2 capsules each morning and 3 capsules night.

Setting

To prevent fever and headache caused by injection of Pegylated Interferon, take 500mg dosage of paracetamol, n-acetylcysteine 200 mg and 20mg analgesic 1 hour before injected. Neuro vitamin needed twice a day to recover body from hinge illness. Always consume vitamin E every day to prevent dry and unhealthy skin. Unstable emotional caused by Pegylated Interferon and Ribavirin side effect could increase relapse trigger, that's why patient have to routinely counseling and sleep before 10 pm to relaxing body and mind. Paracetamol and n-acetylcysteine can be stop after 8th week and always consume vitamin C and vitamin D until therapy done.

Result

Therapy result after 12 week, HCV RNA quantitative: undetectable, HIV viral load: undetectable, CD4 count: 826 and blood Hb: 12. Test result continuing 24 week, HCV RNA quantitative: undetectable, HIV viral load: undetectable, CD4 count: 911 and blood Hb: 13. The end of treatment response, test on 48 week laboratory result on HCV and HIV still undetectable.

POSTER NUMBER:
PAPER NUMBER: 363

MISDIAGNOSIS OF PRIMARY HIV INFECTION DUE TO FALSE POSITIVE EPSTEIN BARR VIRUS AND CYTOMEGALOVIRUS IGM ASSAYS – THREE CASES AND AN EVALUATION OF THE FREQUENCY OF THE PHENOMENON

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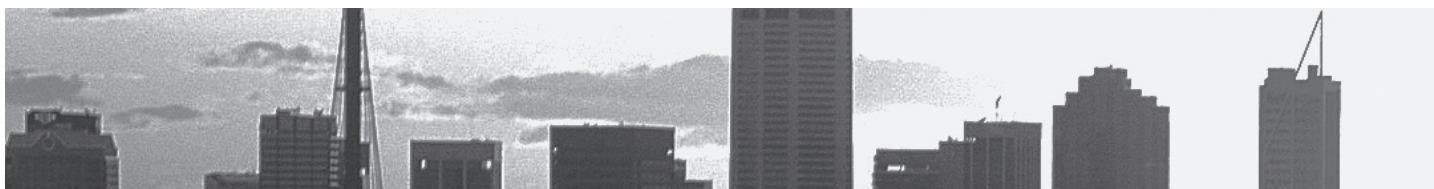
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POSTER NUMBER:
PAPER NUMBER: 202

EFFECTIVENESS CO INFECTION HIV-HEP C TREATMENT BY PEGILATED INTERFERON AND RIBAVIRIN: MANAGING THE SIDE EFFECT

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

POSTER NUMBER:
PAPER NUMBER: 424

**PRURITIC PAPULAR ERUPTION
AMONG PEOPLE LIVING WITH
HIV: A CLINIC BASED STUDY IN
SRI LANKA**

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Pruritic papular eruption (PPE) is a common skin manifestation of HIV/AIDS particularly in the Asia region where there is a high prevalence of mosquitoes. The underlying etiology is identified as an abnormal response to arthropod bites in susceptible individuals. The severity of its symptoms is inversely proportional to absolute CD4 counts. The rash is mainly on the extremities and is extremely itchy at the beginning. Topical steroids appear to be relatively ineffective and lesions and itching is expected to become less severe after commencing ART.

To study some clinical aspects of PPE among twenty five patients attending the HIV clinic of the National STD/AIDS Control Programme, Colombo.

Case notes of twenty five randomly selected patients with PPE were studied and data collected and analysed.

The average age of the patients was 38 years. There was no difference in age and sex distribution. The majority were in WHO stage 2 followed by stage 4 and 3. The duration of the rash varied from 1-8 months. Itchiness and severity of the lesions were inversely associated with the CD4 count. The severity of symptoms worsened with advancing stage of HIV/AIDS. Eight had evidence of herpes zoster. Almost 44% (n=11) had a sexually transmitted infection. Almost all were prescribed local steroid applications but there was no significant improvement. Almost 11% did not show an improvement with ART at 3 months follow up.

A wide spectrum of dermatological manifestations is seen among patients attending the HIV clinic and one distressing illness is PPE. The psychological morbidity adds to the physical morbidity.

POSTER NUMBER:
PAPER NUMBER: 733

**DETECTION OF HUMAN
HERPESVIRUS 8 IN
QUEENSLAND AND VICTORIA
IN HIV-POSITIVE AND HIV-
NEGATIVE PATIENTS**

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HHV-8, regarded as the aetiological agent of Kaposi's sarcoma (KS), HHV-8-associated multicentric Castleman's disease (HHV-8-MCD), and primary effusion lymphoma (PEL) is uncharacterized in Australia due to the use of HAART greatly reducing the incidence of KS as an AIDS-defining condition. This study attempts to characterize HHV-8 in Australia by examining KS and MCD biopsies from both HIV-positive and -negative patients in Queensland and Victoria and determine their associated subtype.

44 biopsies from 38 patients (males:females, 37:1) with a mean age of 49.1 years (28.2-88.6 years) with KS or MCD diagnosed between 2004 and 2009 were examined by haematoxylin and eosin (H&E) staining and immunohistochemistry (IHC) targeting the HHV-8 LANA-1 protein (NCL-HHV8-LNA; Novacastra). Positive controls were sections from embedded BCBL-1 cell lines. Negative controls from 3 different HHV-8-negative biopsies. Confirmation of HHV-8 IHC staining was sought by quantitative polymerase chain reaction (qPCR) targeting ORF73 and ORF26 and HHV-8 subtyping based on sequencing ORFK1.

HHV-8 was detected in two HIV-negative elderly males (78 and 88 years) with classic KS nodules on lower abdomen and left thumb. Biopsies of AIDS-KS lesions positive for HHV-8 were visible at all KS stages (patch to nodule) and taken from the epidermis (n=20), duodenum (n=2), stomach (n=2), and buccal mucosa (n=1). IHC on 13 lymph nodes from HIV-positive males confirmed KS (n=1), MCD (n=5) or both MCD and KS in the same lesion (n=3). qPCR for HHV-8 ORF73 and ORF26 was confirmational in tissue positive by IHC. In two early KS lesions with both negative and weak IHC staining PCR was weakly positive and was positive in an MCD lesion that revealed negative IHC staining. In the remainder of the IHC negative lesions PCR was also negative. HHV-8 isolates sequenced thus far have revealed the presence of HHV-8 subtype A.

HHV-8 was detected in KS and MCD biopsies in Australia by IHC and confirmed by PCR. Lesions appear to be PCR positive before IHC positive possibly due to the presence of replicating not latent HHV-8. HHV-8 subtype A has been detected thus far possibly because the isolates sequenced are from Caucasian HIV-positive males.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

Guangxi is the fifth poorest province and has the second highest burden of HIV infection in China. CMV retinitis is a common opportunistic infection in this setting potentially leading to blindness without early treatment. CMV retinitis is frequently under-diagnosed due to lack of systematic screening and awareness from physicians. In December 2003, Médecins Sans Frontières (MSF) in collaboration with the Guangxi Centre for Disease Control (CDC) opened a free HIV treatment and care project in Nanning, Guangxi Province. The project started systematic CMV retinitis screening in November 2008 for all new HIV patients presenting with a CD4 less than 100.

Routinely collected data between November 2008 and January 2010 was analysed retrospectively. General HIV physicians were trained by an expert ophthalmologist to detect CMV retinitis using an indirect ophthalmoscope. Active CMV retinitis was treated with intraocular gancyclovir injection or valgancyclovir.

Sixty-four patients who had a low CD4 on initial presentation had retinal assessments and 5 (7.8%) had evidence of active or inactive CMV retinitis. Nineteen patients had early retinal assessments (were either referred to MSF clinic from other ART sites, or were patients of the cohort who developed visual symptoms when on ART < 6 months), and 15 had evidence of active CMV retinitis.

CMV retinitis is a common opportunistic infection in HIV patients presenting with a low CD4 count, and may be detected with HIV physicians trained in the use of the indirect ophthalmoscope.

Infection with hepatitis C virus (HCV) is a critical risk factor in human immunodeficiency virus (HIV)-1-infected patients who have survived longer than two decades after infection with HIV-1 without antiretroviral therapy. We evaluated the current status of hepatitis diseases in long-term HIV-1-infected survivors among Japanese patients with coagulation disorders, and estimated the benefits of interferon therapy in these patients.

We utilized the data from the national surveillance that was conducted in 2008. We assumed a binomial logistic function, using HCV subtype and RNA concentration as two predicting variables for the efficacy of interferon therapy. The minimum efficacy of interferon therapy was defined as the probability of attainment of sustained viral response in the previous analysis performed in 2004. In case of missing data, the patient's viral genotype and RNA concentration were substituted by random numbers simulating the distribution of the actual observation. By repeating the computation 1000 times, we estimated the number of sustained viral responders (SVR) resulting from interferon therapy.

Among patients who had been infected with HIV-1 through clotting factor concentrates, the number of patients surviving without having received antiretroviral therapy on 31 May 2008 was 68 (4.7%). Coinfection with HCV was found in 66 (97%) of the 68 patients. Although 12 patients were free of hepatitis, 45 had chronic hepatitis, 1 had hepatocellular carcinoma, and 8 had been treated by interferon. Under the condition corresponding to minimum efficacy, the estimated number of SVR among the 45 patients with chronic hepatitis was 12 ± 2 (27±4%); however, under the improved condition that assumed 50% efficacy at HCV RNA concentration of 6 Log IU/mL for subtype 1, it was 22 ± 3 (49±7%).

The present observation suggests that progression of HCV-related liver disease is inevitable even in HIV-1-infected patients who had survived for a long time without antiretroviral therapy. Therapy for HCV should be started as soon as possible.

A part of this work was supported by KAKENHI (20590521).

POSTER NUMBER:
PAPER NUMBER: 692

RESULTS OF THE FIRST CMV RETINITIS SCREENING PROGRAM IN GUANGXI PROVINCE CHINA

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POSTER NUMBER:
PAPER NUMBER: 217

STATUS OF HEPATITIS C VIRUS INFECTION IN LONG-TERM SURVIVORS AMONG HUMAN IMMUNODEFICIENCY VIRUS-INFECTED JAPANESE PATIENTS WITH COAGULATION DISORDERS

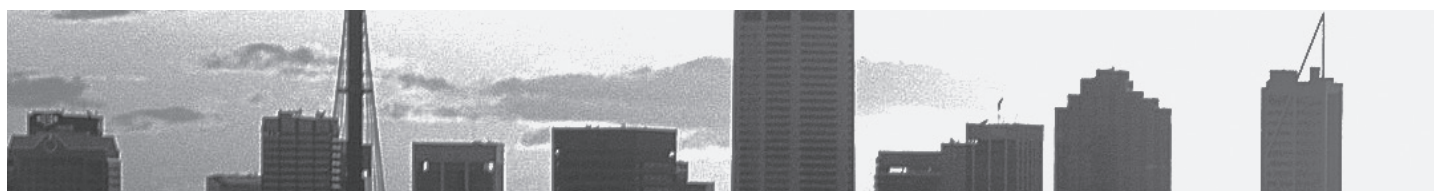
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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

POSTER NUMBER:
PAPER NUMBER: 578

LOCALISED MYCOBACTERIUM AVIUM COMPLEX REACTIVATION FOLLOWING SUCCESSFUL ANTIBIOTIC THERAPY AND IMMUNE RESTORATION.

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Initial mycobacterium avium complex (MAC) infection in the setting of HIV typically occurs at CD4 counts < 50 cells/uL. Although MAC infections have been described in HIV positive patients with higher CD4 counts (>100 cells/uL) these remain rare and mostly represent unmasked infections following initiation of HIV highly active antiviral therapy (HAART). Reactivation of MAC following initial infection and discontinuation of secondary prophylaxis has been described. These infections occur at higher CD4 counts within the first few years of stopping secondary prophylaxis. Late reactivations (>3 years) have not been reported. We report a case of a 46 year old Cambodian heterosexual man who had late reactivation of MAC, nine years after his initial presentation and successful treatment for disseminated MAC in 2001. This was despite excellent virological control with HAART and successful immune restoration with a CD4 count >300 cells/uL since 2003. The patient's response to therapy, progress, and laboratory features (microbiological and immunological) are detailed, with a review of the literature.

POSTER NUMBER:
PAPER NUMBER: 778

INTERFERON GAMMA RELEASE ASSAYS OR TUBERCULIN SKIN TESTING TO DIAGNOSE LATENT MYCOBACTERIUM TUBERCULOSIS INFECTION IN PATIENTS INFECTED WITH HIV: A SYSTEMATIC REVIEW

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Interferon gamma release assays (IGRAs) and enzyme linked immunospot (ELISpot) assays have shown promise as alternative diagnostic tools to the tuberculin skin test (TST) for the diagnosis of latent tuberculosis infection (LTBI). The performance characteristics of these newer assays have not been firmly established in immunodeficient populations including in people with HIV infection.

There is no established diagnostic gold standard for LTBI. Analysis of the existing data requires consideration of this and other aspects of study design, including background rates of LTBI prevalence, correlation to traditional risk factors for LTBI and specific HIV related issues which may influence interpretation of the data.

We undertook a systematic review of IGRAs, ELISpot and TST assays in the diagnosis of LTBI. We conducted a MEDLINE search for articles published between 1966 and June 2010. 810 articles were identified from search terms including TB infection OR TB disease AND Quantiferon OR ELISpot OR interferon gamma release assays OR tuberculin skin test OR t-cell assay AND HIV OR AIDS.

Titles and abstracts were reviewed and we excluded 647 articles including 30 duplicate articles, 50 commentaries, 35 single case reports, 92 studies of HIV negative subjects, 17 guidelines, 7 immune reconstitution articles, 120 non-clinical articles, 32 non-human studies, 25 non-MTB studies, 18 studies where Qunatiferon (QFT) was tested in non-blood samples, 42 policy statements, 109 review articles, 10 treatment studies, 39 vaccine studies, 7 serology studies and 13 other studies. One hundred and sixty three articles were identified including 29 articles that compared TST and QFT (19 in a high prevalence and 10 in a low prevalence setting); 95 articles describing TST alone (45 in a high prevalence, 1 medium prevalence, 49 in a low prevalence setting); 6 articles describing QFT alone (3 each in a high and low prevalence setting); and 6 articles describing ELISpot alone (5 in a high prevalence and 1 in a low prevalence setting). Twenty six articles were rejected on further review of the full article.

The performance characteristics of each assay in populations with HIV infection in different TB prevalence settings will be reported.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

RESISTANCE

Data collection for the Victorian HIV service has had many transformations over the years, from spreadsheets to an intranet database. The current database has inbuilt flagging mechanisms to alert physicians to the need to perform Viral Hepatitis testing (VHT).

The aim of this study was to evaluate the utility of an alert flag on the HIV database, which reminded medical and nursing staff to perform hepatitis serology testing at the recommended intervals. Did technological change result in an improvement in follow up VHT. Phase 1 2001- mid 2007 MS Access database not accessible by physicians, Phase 2 July 2007 –June 2009 intranet database with flag only and Phase 3 01/07/2009 –April 2010 intranet database with flag and algorithms describing recommended testing protocols.

The number of patients attending for HIV review over the three phases were 1502, 1066 and 861. Annual VHT was recommended in phases 2 and 3 only. Testing for Hepatitis markers within 12 months of HIV diagnosis occurred for Hepatitis A (HAV) across the three phases 28.4%, 31.7%, 85.4%, Hepatitis B (HBV) 82.9%, 93.4%, 100%, Hepatitis C (HCV) 42%, 68%, 95% respectively.

In phase 1, 2 and 3 the HAV status remained unknown for 21.1%, 31.8% and 26.0% respectively. In phases 1, 2 and 3 HBV status remained unknown for 28.2%, 7.8%, 5.0%. For HCV Phases 1, 2 and 3 status remained unknown for 30.5%, 13%, 1% of patients respectively.

The proportion of patients tested within Phases 1, 2 and 3 for HAV was 46.1%, 32.6%, 33.2%, for HBV 71.8%, 57.6%, 55.8%, for HCV 64.4%, 63.1% and 54% respectively.

Implementing the new database has seen improvement in testing at time of HIV diagnosis, but no improvement in annual VHT of patients across the phases of technology. This may be due in part to a slow change in culture of physicians in the use of on line technology in the hospital setting, but also a lack of understanding of ongoing risks of acquiring viral hepatitis or reactivation of Hepatitis B and C.

Gianotti-Crosti (GCS) is a viral exanthem mainly affecting children between the ages of 6 months and 12 years. Over the course of 3 or 4 days a profuse eruption of dull red spots develops first on the thighs and buttocks, then on the outer aspects of the arms, and finally on the face. This is caused most commonly by Hepatitis B infection, but other viruses can also cause it.

We report two unrelated, 43 years-old, HIV and Hep B coinfecting males who presented during the same clinic with 4 and 25 month histories of developing multiple non-blanchable, erythematous macules, surrounded by a pale halo, predominantly involving the arms, trunk and face. Both cases shared many of the hallmarks of childhood GCS. We believe that this is the first report in the literature of a GCS like paraviral eruption HIV and Hep B positive adults. Individual lesions resolved and new ones appeared throughout the duration of the rash. The lesions were asymptomatic and there was no recognised prodromal events, although one patient had fevers and sweats throughout the period of the exanthem. Immunoperoxidase studies suggest the presence of Hep B surface antigens (HBsAg) within the vessels of both lesional and perilesional skin, providing further support for the proposed, immune mediated pathogenesis of paraviral eruptions.

Histopathology showed a mild to moderate perivascular lymphocytosis in the upper to mid reticular dermis with some red cell extravasation and scant eosinophils suggestive of a viral exanthem. Preliminary immunohistochemical staining using HepB sAb was weakly positive in the dermal vessels of lesional skin of both patients suggestive of the presence of Hepatitis BsAg in those sites. Further biochemical and serological studies were unable to ascertain another aetiology for this clinically distinct exanthem. The lesions resolved spontaneously in both patients over the next 6 months.

We propose that this exanthem may be due to Hepatitis B and the prolonged duration and distinctive appearance may be due to the HIV coinfection.

We present these cases as good examples of a distinct paraviral exanthem.

POSTER NUMBER:
PAPER NUMBER: 465

USING TECHNOLOGY TO IMPROVE THE MANAGEMENT OF VIRAL HEPATITIS IN HIV INFECTED INDIVIDUALS

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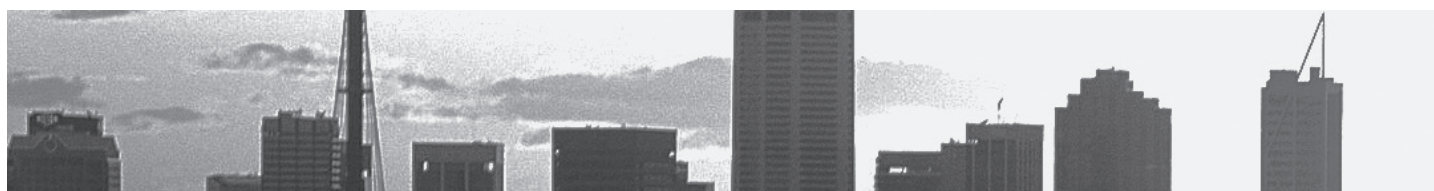
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POSTER NUMBER:
PAPER NUMBER: 793

A DISTINCTIVE VIRAL EXANTHEM (ATYPICAL GIANOTTI-CROSTI SYNDROME) IN TWO HIV AND HEPATITIS BE CO-INFECTED MEN.

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

POSTER NUMBER:
PAPER NUMBER: 683

**SUSTAINING THE AVAILABILITY
OF PEDIATRIC ARV IN JAKARTA,
INDONESIA**

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Within January to march 2010 there are 46 babies born with HIV. Responding to the situation the need for pediatric ARV is emerging. Currently treatment for HIV infected baby is done with ARV for adult, however there is no proper dose as the pediatric drug did not available.

From February 2010, Indonesia Network of People Infected by HIV (JOTHI) delivered advocacy effort for Ministry of Health to address the need of pediatric ARV. Ministry of Health with support from Global Fund now included provision of pediatric ARV within care, support and treatment program. Advocacy also delivered to Indonesia Food and Drug Association as it is the authorize bodies to give recommendation for production of generic type of pediatric ARV to maintain the sustainability of pediatric ARV.

POSTER NUMBER:
PAPER NUMBER: 442

**EXPEDITING IN-COUNTRY HIV
CONFIRMATORY TESTING IN
PACIFIC ISLAND COUNTRIES AND
TERRITORIES**

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Most Pacific Island Countries and Territories (PICTs) do not have capacity to perform HIV confirmatory testing using algorithms based on enzyme immunoassays (EIA) and/or western blot (WB). Many PICTs perform HIV screening using the Determine HIV1/2 (Inverness) rapid test. When a sample is reactive on Determine it is referred internationally to a laboratory for confirmatory testing. Shipping specimens internationally has, however, proven to be unreliable with long turn-around times or degradation of specimens rendering them un-testable.

In 2008 regional development partners met to discuss improving and expanding HIV testing in the Pacific. At this meeting the Pacific HIV Testing Task Force (HTTF) was created and charged with overseeing the development of a rapid test based algorithm which could yield confirmed HIV test results in-country. The HTTF adopted a classic three-phased validation approach and work on evaluating five candidate rapid tests with specimens from PICTs commenced.

Difficulties with international shipment and the low HIV prevalence in most PICTs had contributed to phase 1 of the evaluation, completed in December 2009, taking over 1.5 years. This long time frame is a concern since there are several known instances in which delayed confirmatory testing for pregnant women may have contributed to vertical HIV transmission, highlighting the need for timely test results.

In early 2010 the HTTF reconvened to examine results of the phase 1 work and review the overall validation strategy. Concerns were raised that the planned three-phased approach, including an 18 month pilot of phase 2 in just four PICTs, would unnecessarily delay access to any validated HIV testing algorithm for the rest of the Pacific. It was agreed that phase 1 yielded sufficient data to recommend a suitable rapid-test based algorithm for in-country HIV confirmatory testing and that adoption of this algorithm should be supported as a matter of urgency. We describe here a revised strategy in which the algorithm can be rolled out to more countries, more quickly while still maintaining the same level of quality control.

POSTER NUMBER:
PAPER NUMBER: 487

**INVESTIGATION OF
INTERNATIONAL MODELS OF
CARE FOR AGEING INDIVIDUALS
WITH HIV INFECTION**

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The evolving needs of an ageing HIV population pose increasing clinical challenges to both clinical care and the healthcare system. In response to the needs of our population in Victoria, the Victorian HIV Consultancy (VHIVC) developed a model of care for individuals requiring high level care which has been in operation for five years. Supported by the Department of Health, Victoria the VHIVC physician and clinical nurse consultant visited London and San Francisco in February 2010. The goals of this study tour were to investigate both existing models of care for ageing individuals with HIV and linkages between the HIV care and aged care systems and finally to examine the role of nurse specialists in the care of ageing individuals with HIV. The findings and implications of this study tour will be discussed.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

The Bobby Goldsmith Foundation has delivered housing services to PLWHA since the mid-nineties at which time the Supported Accommodation units were a last stop for those dying from AIDS related illnesses. Since the dramatic improvement in HIV treatment, the focus of service delivery has shifted from providing a safe place for people to die, to a pathway back to life.

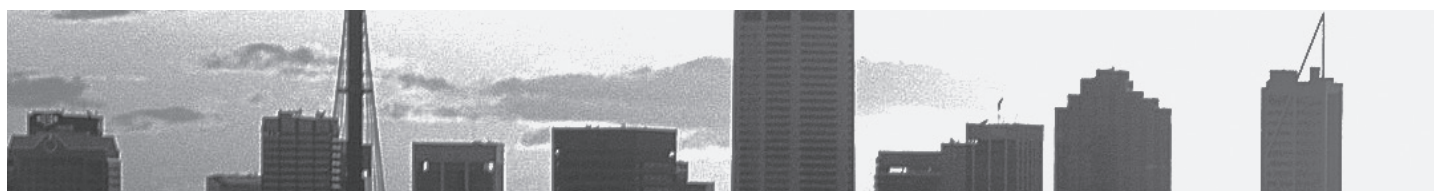
This presentation will explore the challenges and success stories of providing Supported Accommodation to PLWHIV, look at the drastic changes in the purpose and client group for the service and provide deeper insight into different programs provided by the Bobby Goldsmith Foundation which are currently being considered to provide support to PLWHIV in other states.

POSTER NUMBER:
PAPER NUMBER: 44

**SUPPORTED ACCOMMODATION
FOR PEOPLE LIVING WITH HIV:
FROM A HOME FOR THE DYING
TO A PATHWAY BACK TO LIFE**

El-Monir, K.

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

POSTER NUMBER:
PAPER NUMBER: 401

RISKY BEHAVIORS AMONG CAMBODIAN MEN WHO HAVE SEX WITH MEN: HIV/AIDS KNOWLEDGE, ATTITUDES, AND PRACTICES

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Cambodia

Introduction: In Cambodia, as well as globally men who have sex with men (MSM) is a key most-at-risk-population (MARP) of HIV transmission. Although national HIV prevalence among general population is 0.7% prevalence of HIV in MSM nationally is over 5%, reaching as high as 8.7% in urban areas. Therefore, it is crucial that MSM in all locations receive targeted and appropriate HIV prevention information and health services. A survey by Khmer HIV/AIDS NGO Alliance (KHANA) on HIV/AIDS knowledge, attitudes, practices and related risk behaviors among MSM is vitally important to provide a robust evidence base for prevention programs both at project and national levels.

Methods: A quantitative method was used to identify and determine the magnitude of preventive project indicators. The survey was conducted in six provinces in 2009. About 260 MSM were recruited by using venue-based sampling technique. Epi-Data 3 was employed for double data entry and STATA 10 was use for statistical analysis.

Results: MSM who engaged in commercial sex, many sold more sex to men (31.7%) than to women (2%). And, consistent condom use was not high (69.3%). Also lubricant use during sex reached only 36%. About 60% of MSM reported HIV testing, and 75% of those who tested received their results in the last six months. The self-perceived risk of HIV/STI among MSM was unevenly distributed. Close to 60% perceived themselves at high risk of acquiring HIV/STI compared to general men and women. Only one-quarter of MSM perceived themselves to be at a lower risk than others. Places where MSM frequently socialized were at parties (78%) followed by their homes (74.5%), concerts (61.4%), and on the street (51.3%).

Conclusion: Since the consistent condom use was not high enough, more preventive efforts are needed to reduce the risk of HIV transmission among this group. Program interventions targeting lubricant use should be also strengthened. Prevention programs will also benefit from outreach activities where MSM socialize.

POSTER NUMBER:
PAPER NUMBER: 283

POSITIVE WITH PETS: THE POSITIVE IMPACT OF PET OWNERSHIP WHEN LIVING WITH HIV

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Australia.

In developed nations, increased longevity amongst people with HIV has drawn attention to the need to understand, maintain and improve quality of life, especially where a person feels stigma attached to their condition. For some people, HIV-related stigma can directly impact on their quality of life, social interactions and sources of support. In Australia, around half of all people with HIV live with a pet. Significantly, around 65% of these pet owners report receiving a lot of support from their pet, second only to their partners. The aim of this study was to investigate the role of pets in the lives of people living with HIV in developed nations, specifically the impact of pet ownership on emotional wellbeing and quality of life.

Participants were 254 people from developed nations living with HIV, ranging in age from 18 to 73 years. All participants completed a composite questionnaire comprising measures of personal wellbeing, social support, unsupportive social interactions, HIV-related emotional wellbeing, general health and demographic variables. Pet owning participants also completed an instrument measuring attachment to their pet. Participants chose to complete the questionnaire online or in pen and paper form.

Sixty two per cent of participants lived with pets, a finding comparable with the incidence of pet ownership in Australia and other developed nations. All participants reported experiencing some unsupportive social interactions related to their diagnosis, and this was negatively correlated with emotional wellbeing. There were no significant differences in emotional wellbeing between pet owners and non-pet owners. However, amongst those participants who reported high levels of unsupportive social interactions, pet owners showed significantly better emotional wellbeing than non-pet owners. Importantly, 99% of pet owners agreed that their pet added to their happiness, and 97% agreed that loving their pet helped them stay healthy.

Where HIV remains a stigmatised condition, attachment to a pet may act as a buffer to reduce the impact of stigma and improve emotional wellbeing. It is argued that if this relationship can reduce the disease burden of HIV, pet ownership should be encouraged and supported by the health systems of developed nations.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

Anecdotally utilization of sexual health services (SHS) by clients from communities vulnerable to STI and HIV has been low. As part of the AusAID funded "Pacific HCW Workforce Development Project (Sexual Health)" a series of four workshops were held in 2009 with HCW from sexual and/or reproductive health backgrounds, from health settings across Fiji, to better understand the access barriers.

Fear of stigmatization: SHS are located in busy, prominent areas and potential clients could be concerned about being recognized

Fear of HCW discrimination: many HCW are judgmental with people from vulnerable communities, HCW attitudes and behavior towards those at risk was considered a significant deterrent

Concern over lack of HCW confidentiality: a general perception that HCW inappropriately share confidential client information which can quickly spread through the community

Cultural taboos around discussing sex: reluctance to discuss sexual behaviours particularly when there is gender or age disparity

Poor HCW/ Client relationships: high staff turn-over prevents establishing a trusting, long term relationship with the HCW

Lack of awareness: poor understanding about the range of services offered by SHS

Shame: traditional values (and laws) of the Pacific means that those at risk may experience difficulties admitting to their behaviours

Many of these barriers could be addressed by improving HCW capacity to work with clients from vulnerable communities. The project is developing training modules for HCW in the field and post graduate students of the health professions. Modules aim to improve HCW communication skills, understanding of vulnerable communities, confidentiality requirements and address factors that contribute to stigma and discrimination in the workplace.

We present the case of a 55 year old man with human immunodeficiency virus (HIV) and hepatitis B virus (HBV) co-infection with the management problem of the dual diagnosis of hepatocellular carcinoma (HCC) and an adenocarcinoma of unknown primary in the liver, diagnosed concurrently. He was diagnosed with HIV in 1984, however he did not receive treatment until 2009, maintaining good virological control over this period. Chronic hepatitis B was diagnosed in 2001, and he was commenced on entecavir in 2006. A routine abdominal ultrasound in 2007 showed no evidence of HCC.

In 2009 a large 10cm lesion in the left lobe of the liver was found on abdominal ultrasound. Further imaging also showed two smaller liver lesions. Alpha-fetoprotein levels were normal, but biopsy of the large liver lesion was consistent with HCC. He underwent trans-arterial chemoembolisation, radiofrequency ablation and ethanol injection for the HCC. Biopsies of the two smaller hepatic lesions were suggestive of poorly differentiated adenocarcinoma. Extensive investigation failed to reveal a primary malignancy. He proceeded to have 4 cycles of palliative chemotherapy. He was commenced on tenofovir/emtricitabine, efavirenz and atazanavir/ritonavir in July 2009, after an HIV genotype revealed the M184V mutation

Despite a poor prognosis he remained well with no disease progression on imaging until early 2010. In April 2010, he was admitted to hospital with symptomatic anaemia (Hb 4 gm/dl) and melena. A gastroscopy showed a large malignant ulcer, deemed high risk for bleeding and not amenable to endoscopic management. Imaging suggested a liver lesion had breached the liver capsule and was abutting the lesser curve of the stomach. It was unclear whether the gastric ulcer represented the primary adenocarcinoma or gastric invasion of the hepatic malignancy. He underwent surgical resection of the gastric ulcer and the left lobe of the liver as a palliative procedure. He had an uneventful post-operative recovery and continues to defy the odds of survival. He is now being considered for further treatment with sorafenib.

This case highlights some treatment dilemmas in the management HIV/HBV co-infection, especially related to the surveillance, diagnosis and treatment of HCC.

POSTER NUMBER:

PAPER NUMBER: 558

**HEALTH CARE WORKER
PERCEPTIONS OF BARRIERS
PEOPLE FROM VULNERABLE
COMMUNITIES EXPERIENCE
WHEN ACCESSING SEXUAL
HEALTH SERVICES.**

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POSTER NUMBER:

PAPER NUMBER: 451

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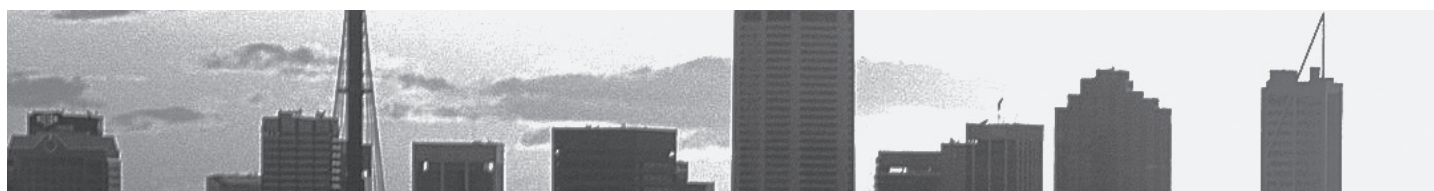
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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

POSTER NUMBER:
PAPER NUMBER: 372

**BUILDING REGIONAL CAPACITY
FOR HIV CARE AND TREATMENT
THROUGH SHORT COURSE
TRAINING, AUSTRALIA**

Nguyen DM, Reis EJ, Tanya Scotcher

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Society for HIV Medicine, Sydney,
New South Wales, Australia

The Australasian Society for HIV Medicine international division developed an annual international training program on HIV care and treatment for HIV professionals in the Asian and Pacific regions. The course consists of a 4 day interactive training covering topics of HIV medicine and related issues. Over the last 2 years of 2008 and 2009, 54 health care workers from nine countries in Asia and the Pacific region have taken this course. In 2010 we assessed the impact of this course on knowledge and ability of these health care workers to manage HIV and care services.

An immediate evaluation was performed at the time of the course to assess the improvement in knowledge and skills as well as the relevance of course's contents and method of delivery. An evaluation at 6 and 12 month after training was carried out through anonymous email interviews with trainees to learn about the long term effect of the course on the participants' practice and the use of knowledge and skills in their own settings.

Immediate training evaluation documented improved knowledge in HIV care and management among participants. The evaluation at 6 months and 12 months after training reported moderate improvement in the level of confidence in diagnosing, counselling, treating or in the long-term management of HIV patients. The transfer of knowledge to colleagues is documented ranging from knowledge sharing in their team to giving presentations in regional conferences. This is likely beneficial in terms of the impact of the course on not only the direct participants, but also on a regional level.

The short course proves to be effective in developing the competencies in HIV care and management as part of efforts to strengthen HIV workforce in the region.

POSTER NUMBER:
PAPER NUMBER: 661

**CLINICAL MENTORING AND
CAPACITY BUILDING FOR THE
SCALE UP OF METHADONE IN
VIETNAM**

Nguyen T N¹, Nguyen T L², Pham H M³, Mulvey P K³, Burdon R¹, Nguyen T H², Nguyen T M N⁴, Ali R⁵, Ling W⁶, Jacka D⁷, Mills S J¹, Vuong T H T¹

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University

⁶ Integrated Substance Abuse
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Introduction

In Vietnam, 60% of HIV is associated with injecting drug use. In 2008, the Vietnam Ministry of Health (MoH) established a Methadone Maintenance Therapy (MMT) pilot as the key intervention approach to reduce HIV transmission. At the beginning, very few health workers had experience working with methadone. The capacity building approach has been developed to scale up services in 30 provinces providing with the aim of to 80,000 IDUs (40% coverage in Vietnam) by 2015.

Methods

With support from PEPFAR/CDC/FHI and WHO, Vietnam MoH planned a strategic and systematic approach to developing the capacity of a cadre of health professionals. Key approaches were to:

- Develop national guidelines, training curriculum, and standard operating procedure (SOPs) at the onset of the pilot program
- Establish clinical learning sites to ensure a theory- clinical practice cycle
- Identify potential local Government trainers and mentors for training and clinical supervision. Formalizing local clinical networks of MMT providers and regular clinical case conferences

Results

Engagement of key government agencies and international expertise in development of national guidelines, SOPs, and curriculum, has resulted a national, high quality training and clinical mentoring for the MMT program. Since March 2008, program has provided 5 accreditation trainings; 4 advanced trainings for 60 MMT doctors, 3 MMT introductory trainings for 102 doctors providing ARV, TB, and mental health; 2 trainings for 20 local government mentors/trainers; and formed 4 practicum learning sites. Doctor's knowledge improved following training (73.8% post vs. 32.8% pre, p=0.0001) as did their positive attitudes toward IDUs (WHO/CAS tool, 9.6 vs. 7.5, p=0.03)

Conclusions:

- Quality and consistency of training is maximized by government ownership and technical support by appropriate local and international agencies.
- Mentoring and support is critical for good attitude and high quality service delivery—especially for a new technical interventions
- Developing national-level clinical mentors and trainers in new technical areas requires a phased capacity building approach and ongoing mentoring and supervision
- Capacity building efforts to increase MMT coverage are necessary to curb the HIV epidemic among IDUs in Vietnam.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

ART facilities in PNG require robust systems for managing patient information in order to provide high-quality care and efficiently manage clinic operations. Program managers also require these systems to monitor program outcomes and inform policy. These needs become more acute as the number of patients accessing services increases dramatically, as has happened with ART scale-up in many settings.

PNG's STI/HIV/AIDS program in partnership with Clinton Foundation surveyed HIV patient databases used in other countries. Ultimately, a Microsoft Access-based application developed for the Tanzanian National AIDS Control Program most closely matched the PNG program's needs. Clinton Foundation purchased the source code on behalf of the PNG government and contracted with local developers from the University of Papua New Guinea to customize the application. The customized database was then piloted for four months at Port Moresby General Hospital in 2008. Now the database has been rolled out to major ART clinics in the provincial hospitals around the country.

Clinic staff reported spending 50-70% less time on data entry than previously. 3.5 times more patient visits were recorded during pilot compared with four-month pre-pilot period; other indicators of improved data quantity/quality including patient tracking and case follow ups. -Pilot database endorsed for national adoption and roll-out is been carried out in all ART sites.

It is not necessary to "reinvent the wheel" when it comes to HIV patient database software. Well-designed software can reduce data entry burden, while also collecting more, better-quality data, and most importantly, improve management of clinic operations and patient care (e.g. defaulter tracing).

According to WHO's Global Tuberculosis Control Report 2009, 3% of all new TB patients in Indonesia are HIV positive. Provincial Health Department indicates that by March 2010, there were 3,272 people with HIV and AIDS in South Sulawesi. Research has shown that someone who is HIV-positive and infected with TB is five to seven times more likely to develop active TB than someone infected with TB without HIV. Coinfection has a profound effect on emotional and social well-being of individuals and their families since they often fear disability, powerless, death, stigma and social isolation. This research explores perception of people with HIV and TB and household members about how they give emotional support to them and what kind of emotional support is needed by PLWH and TB.

The study was conducted in consultation with the coordinator of HIV care and support program in Makassar who played a pivotal role in recruiting participants in this study. Data was collected using semi-structured in-depth interviews with four PLWH and TB which included three men and one waria, and two members from each household. The study shows that each household experiences different psychological burdens, depending on their acceptance to HIV status. It is also evident that social status may be important in accessing and providing support. A family member from lower social status household indicates that her acceptance to the existing disease affects on their support. This is based on the idea that no matter what the disease is, they need to help each other. But, there's also a different kind of support among household members.

Parents support more like give advice about health status. Sisters brothers support more to keep the patient in the house not just in order to avoid shame and public scrutiny, but they also believe that this is the best way to protect the patient from stigma and social isolation. However, PLWH themselves expect to be treated normally, except if they get sick or is hospitalized. Despite the disease, they still want to have a meaningful social life.

POSTER NUMBER:
PAPER NUMBER: 506

ADOPTING AND IMPLEMENTING PATIENT INFORMATION MANAGEMENT SYSTEMS IN ART SITES IN PAPUA NEW GUINEA

Parunga A, Millan J

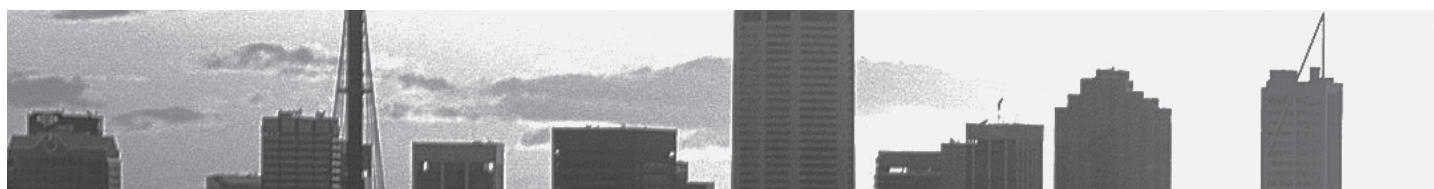
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POSTER NUMBER:
PAPER NUMBER: 86

THE IMPORTANCE OF EMOTIONAL SUPPORT: HOUSEHOLD SUPPORT AND QUALITY LIFE OF PLHIV AND TB IN MAKASSAR

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

POSTER NUMBER:
PAPER NUMBER: 360

**ECONOMIC EVALUATION OF
MONITORING VIROLOGIC
RESPONSES TO ANTIRETROVIRAL
THERAPY IN HIV-INFECTED
CHILDREN IN RESOURCE-LIMITED
SETTINGS**

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This study aimed to assess the cost-effectiveness and -utility of different frequencies of monitoring viral load of HIV-positive children initiating antiretroviral treatment (ART) in a resource-limited setting.

An agent-based simulation model of virological and immunological outcomes of HIV-infected children on ART was built and directly informed by a longitudinal cohort study of 304 HIV-infected children starting ART in Thailand between October 2001 and May 2009. The model simulated expected clinical outcomes of CD4 percentage (CD4%) and viral load over time among children on ART according to different frequencies of viral load monitoring and initiation of second-line therapies where appropriate. Cost-utility, expressed as cost per quality adjusted life-years (QALYs) saved, and cost-effectiveness, expressed as cost per year of virological failure averted was calculated across a variety of monitoring frequencies.

Compared with the status quo, of no viral load monitoring, all frequencies of monitoring and access to second-line ART led to significant reductions in the number of children failing ART after 10 years. A single screening during the first year of ART led to an estimated 43.9% reduction in ART failures after 10 years, with repeated viral load monitoring leading to an average 75.1% reduction. The cost per year of virological failure averted, including antiretroviral drug costs, ranged from US\$2,332 (IQR: US\$2,311–US\$2,365) for a one-off screening 30 weeks after the initiation of ART to US\$4,098 (IQR: US\$4,057–US\$4,134) for screening children every 6 months.

Most individuals initiated first-line treatment with a low CD4% and recovered immunologically regardless of monitoring frequency; therefore only a modest gain in QALYs was observed. The incremental cost per QALY gained, attributed to monitoring alone, ranged from US\$1,109 (IQR: US\$859–US\$1,557) for a one-off screening during the first year of ART to US\$15,817 (IQR: US\$13,961–US\$19,855) for screening children every 6 months.

Even very infrequent viral load monitoring is likely to provide substantial clinical benefit to HIV-infected children on ART and be moderately cost-effective. Without access to second-line drugs and regular viral load monitoring the current efficiency of first-line therapies is likely to be compromised, ultimately leading to a reduction in future drug options for Thailand's population.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

SPECIAL GROUPS

Indonesian Network of People Infected by HIV (JOTHI) supported by AUSAID through HIV and AIDS consortium and Indonesian Partnership Funds piloted Our Health program in 11 provinces to improve the effectiveness within care, support and treatment services available and improving enabling environment in AIDS response in Indonesia.

The program was design to increase the capacity of people living with HIV (PLHIV) on treatment education with utilization treatment literacy aimed to organize PLHIV in delivering treatment advocacy in increasing access to services needed including sexual and reproductive health services and social economic support for PLHIV. The program also recruited as many as possible volunteer from families, students, health service providers, government, community and religious leaders to involve actively in the program, as an effort to reduced stigma and discrimination to PLHIV.

Within provinces implemented the program there are significant improvement in PLHIV leadership in AIDS response. It implies to improvement in health services for PLHIV, including availability of CD 4 count and RNA test to support the antiretroviral treatment, opportunistic infection medicines, availability of Prevention Mother to Children Transmission services and access to public health insurance. Partnership developed with Provincial Ministry of Social Affairs were able to addressed socio economic needs through micro economic support program for PLHIV in several provinces and support for women and children infected and affected by HIV. Partnership with mass media increased the level of PLHIV active involvement in provincial and national decision making process related to HIV and AIDS, including positive public campaign delivered towards government officials and political parties to increase the awareness of AIDS.

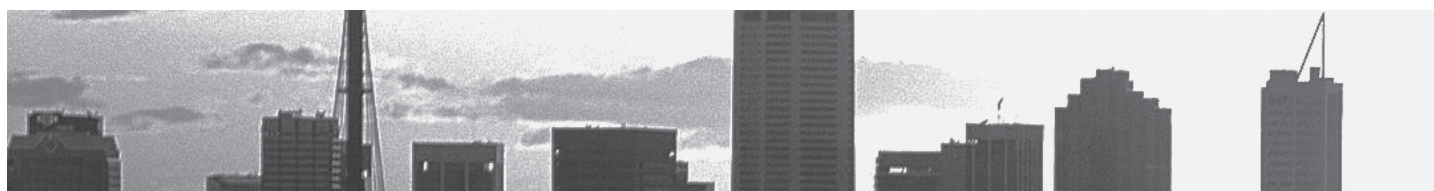
AIDS response program in Indonesia have to consider comprehensive and broader aspects in order to achieve the objectives in combating the epidemic with PLHIV performing crucial roles in preventing new infections without having their rights as human being violated. The existing services related would also have to improved and sustainable with clear commitment and support from the government.

POSTER NUMBER:
PAPER NUMBER: 358

INCREASING THE LEADERSHIP OF PEOPLE LIVING WITH HIV IN AIDS RESPONSE IN INDONESIA

Syarif, Omar

Jaringan Orang Terinfeksi HIV
Indonesia Jakarta, Indonesia



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

POSTER NUMBER:
PAPER NUMBER: 356

THE CLINICAL SIGNIFICANCE OF CD4+ T-CELL COUNTS IN ASIAN AND CAUCASIAN HIV-INFECTED POPULATIONS: RESULTS FROM TAHOD AND AHOD.

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Background

Asians have lower CD4+ counts compared to Caucasians at any given CD4+ percentage. The clinical significance of these differences in CD4+ counts between Asian and Caucasian populations is unknown.

Methods

Patients who ever started combination antiretroviral therapy (cART, defined as ≥ 3 drugs) and were recruited to either of the two prospective cohorts, the TREAT Asia HIV Observational Database (TAHOD, n=3356, predominantly Asian) and Australian HIV Observational Database (AHOD, n=2312, predominantly Caucasian) were followed up for 23144 person-years. The study endpoints were AIDS or death and all-cause mortality. We used Cox regression models to test for the interaction between cohort (TAHOD/AHOD) and the relationship between time-updated CD4+ count category (lagged by 3-months) and endpoints. Models were a priori adjusted for baseline covariates (gender, hepatitis B and C co-infection, HIV exposure category, and prior AIDS) and time-updated covariates (HIV RNA category lagged by 3-months, age, on or off cART, and calendar year, new AIDS (mortality endpoint only). Sensitivity analyses included i) adjusting the frequency of CD4+ count measurements in AHOD to mirror TAHOD, ii) excluding tuberculosis endpoints and iii) using time-updated CD4+ counts and HIV RNA levels, without lagging.

Results

TAHOD participants were more likely than those from AHOD to be: younger (mean age in years: 38 vs. 43), female (30% vs. 5%), heterosexual (67% vs. 9%), with hepatitis B co-infection (10% vs. 6%), with detectable HIV RNA load (65% vs. 40%) and with prior AIDS (46% vs. 20%). There were 382 AIDS or death events in TAHOD (incidence-rate: 40.68/1000 person-years) and 305 in AHOD (incidence rate: 23.88/1000 person-years). There was no statistically significant interaction by cohort (TAHOD/AHOD) in the adjusted analysis for time-updated CD4+ count category (lagged by 3-months) and AIDS or death ($p=0.211$), nor all-cause mortality ($p=0.166$). The results from the sensitivity analyses were qualitatively similar (not shown).

Conclusion

The prognostic meaning of absolute CD4+ counts in terms of AIDS or death or all-cause mortality was not found to vary between Asian and Caucasian populations. These findings suggest that the CD4+ count thresholds for predicting outcomes defined largely in Caucasian populations are equally valid in Asian populations.



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

Data collection for the Victorian HIV service began in 1985, over 25 years has become a valuable tool for physicians working with people with HIV. The latest version of the Victorian HIV Service database at the Alfred Hospital includes alerts for lipid testing, letting physicians know when a patient is due for testing. The importance of monitoring lipid profiles in people with treated HIV is well documented.

This study aims to investigate the impact of the HIV database alert and algorithm function on lipid testing over three major technological phases of the HIV Database. It is hypothesised that there will be a percentage increase in lipid testing at HIV diagnosis and at initiation of active antiretroviral therapy (ART) over the three phases of technological change to the database.

Patients actively seeking care from the Alfred HIV service over three technological phases of the database were identified. The proportion whom had fasting lipids performed over the three phases was calculated. Phase 1 (01/01/2001 to 30/06/2007) was a Microsoft Access database with no clinician access, phase 2 (01/07/2007 to 30/06/2009) introduced an intranet database with flags for lipids, phase 3 (01/07/2009 to 30/04/2010) introduced a flag with an algorithm that outlined the testing schedule for lipids. The algorithm for lipids included a fasting lipid at HIV diagnosis and ART initiation and annually after ART initiation.

Total patients attending the Alfred Hospital for review in phase 1, 2 and 3 was 1502, 1066 and 861 individuals respectively. Annual testing increased by 12% from phase 2 to phase 3 (49.6% to 61.6%). Lipid testing at HIV diagnoses saw a 31% (44% to 75%) increase in testing between phase 1 and 2 and a 25% (75% to 100%) increase between phase 2 and 3. Lipids at commencement of ART saw a steady increase across the 3 phases (29%, 58% and 86% respectively).

Each new phase of the database saw a percentage increase in lipid testing annually and at HIV diagnosis and initiation of ART. This indicates that the introduction of an alert and algorithm can improve testing and in turn improve patient care.

A previous HIV-NAT study showed that a low dose of 200mg/100mg Atazanavir/ritonavir (LD ATV/r) provided adequate pharmacokinetic parameters in HIV-infected Thai adults, and reduced the prevalence of hyperbilirubinaemia during the period of study. LD ATV/r could also result in cost-savings in resource limited settings, and increase adherence because of reduced prevalence of adverse effects.

Retrospective cohort study of patients commencing ATV/r 200/100 mg before 01 November 2009 (baseline) with at least one post-baseline viral load measurement after 24 weeks.

Forty-six patients (44% male) with median age 42 (IQR 38-48) years and baseline body weight 56 (IQR 50-63) kg were included in the analysis. At baseline, CD4 count was 430 (IQR 310-529) cells/mm³, 37 (80%) had viral load < 50 copies/mL and bilirubin was 1.4 mg/dL (IQR 0.8-2.6). All patients switched from another PI regimen with 74% switching from ATV/r 300mg/100mg, 9% switching from lopinavir/r, 13% from indinavir/r and 4% from other PIs. Reasons for switching were change of protocol (35.3%), hyperbilirubinemia or liver toxicity (55.9%), high ATV level (5.9%) and pill burden (2.9%). Median time for taking LD ATV/r was 60 (IQR 32-82) weeks. At week 24, 41 (100%) patients had undetectable viral load and 26 of 27 (96.3%) with follow-up to 48 weeks had undetectable viral load. Nine patients had detectable viral load at baseline and 7 of these subsequently became undetectable. Hyperbilirubinaemia (>1mg/dL) after changing to LD ATV/r decreased from 64% to 35%. 26 of 46 patients had ATV /r concentration performed and none had subtherapeutic plasma concentrations of ATV <0.15 mg/L. 9 (20%) patients with undetectable viral load discontinued treatment with LD ATV/r, 4 of these discontinued due to adverse effects, and other reasons for discontinuing were drug out of stock (2 patients), pill burden, referred to another healthcare facility and death from pneumonia (1 case each).

Regimens with ATV/r 200mg/100mg provide ATV adequate plasma concentration and virological suppression with reduction in hyperbilirubinemia.

POSTER NUMBER:
PAPER NUMBER: 485

ALERTING THE PHYSICIAN – LIPIDS TESTING IN A HIV POPULATION

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POSTER NUMBER:
PAPER NUMBER: 746

EFFICACY AND SAFETY OF ATV/R 200/100 MG (LOW DOSE)

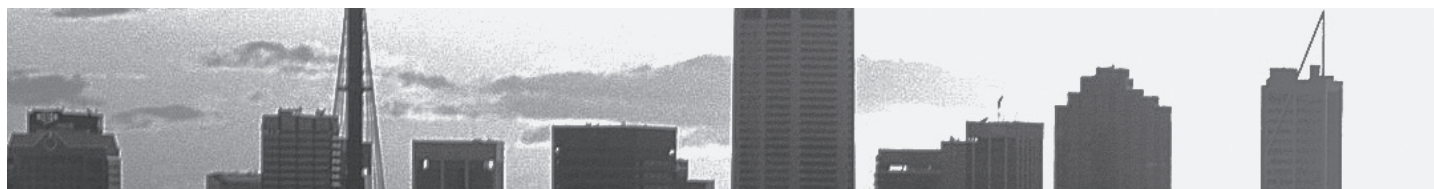
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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

POSTER NUMBER:
PAPER NUMBER: 441

EVALUATION OF A SIMPLE, LOW THROUGHPUT AND LOW COST CD4 T-CELL ENUMERATION PLATFORM

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CD4 T-cell count is the most important parameter to guide when to initiate antiretroviral therapy (ART) and is also routinely used for monitoring the therapeutic response to ART. In most Pacific Island Countries and Territories (PICTs), where HIV-prevalence is low and populations highly dispersed, CD4 testing is not available. We evaluated a new CD4 assay (PIMA™ Analyser and PIMA CD4 cartridge, Inverness Medical™) for accuracy, reliability, ease of use and suitability for resource-constrained PICTs.

Comparison between PIMA and Becton Dickinson (BD) FACSCCount was carried out on EDTA whole blood within 24 hours of collection. Five different technicians performed the testing on one FACSCCount and one of two PIMA™ analysers from 26/03/2010 to 05/05/2010. Precision on one PIMA was also analysed by repeated testing with control cartridges.

A total of 53 samples were tested in parallel on PIMA and FACSCCount. The CD4 counts ranged from 69 to 2664 cells/ml on the FACSCCount and 64 to 2616 cells/ml on the PIMA. Wilcoxon non-parametric test and Z Test demonstrated that the results between the two instruments did not differ significantly. The Spearman correlation coefficient R was equal to 0.98 and we conclude that there was a significant link between the two variables ($p < 0.0001$). Precision was high with coefficients of variation $< 1.4\%$ and $< 0.9\%$ using repeated measurements of manufacturer-supplied "low" and "normal" controls respectively.

Operating the PIMA analyser was simple, required little user input and was easy to learn. The PIMA CD4 cartridge was also easy to use, although care is required to introduce the test sample to the cartridge blood collection capillary due to the small size. Testing took about 10 to 15 minutes after insertion of the test cartridge into the analyser.

The PIMA CD4 assay provided accurate CD4 T-cells count correlated with the benchmark method and high precision. The instrument and cartridge were easy to use, there are very few operator-performed steps and little operator exposure to blood. Combined with the fact that all reagents are lyophilised inside the cartridge, which can be stored at up to 30°C the PIMA platform appears suitable for low-throughput CD4 testing.



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

The START study aims to determine whether immediate initiation of antiretroviral treatment (ART) is superior to deferral of ART until the CD4+ declines below 350 cells/mm³ in terms of morbidity and mortality in HIV-1-(infected persons who are ART-naïve with CD4+ T-cell counts >500 cells/mm³; participants are randomized in equal proportions to the early or deferred groups.

Substudies provide opportunities to examine specific public health outcomes regarding the risks and benefits of early ART. Currently there are five START Substudies: Genomics, Informed Consent, Arterial Elasticity, Pulmonary Function and Neurology. Not all sites will participate in these substudies and participation in substudies is optional with separate consent. This poster will review the science, design, implementation and recruitment to-date of each of these five substudies in START.

Two studies are completed pre-randomisation, genomics and informed consent. The former is a nonrandomized multicenter protocol designed to obtain a whole blood sample from START participants. Specimens will be archived for retrospective testing aimed at exploring genetic aspects of the clinical and immunological outcomes in START. The Informed Consent substudy involves a cluster randomisation, such that at each participant sites, all participants are consented using one of two types of consent form, the standard and concise version. This substudy explores participant comprehension of the study.

There are three substudies which require ongoing visits post randomisation. In each, visits marry with those of the main study visits are annual post year 1. In each, the impact of the early vs. deferred ART on different end-organs is explored. In the Arterial Elasticity Substudy, cardiovascular health is explored using a hand-held tonometer to measure arterial elasticity and plasma biomarkers in 300 patients. The Neurology Substudy will determine whether early ART is superior to deferred ART with respect to neurocognitive function using a battery of standard neurocognitive tests in 600 patients. The Pulmonary Substudy will determine if immediate ART alters the rate of lung function decline and overall respiratory health compared to deferred ART in 1000 patients.

Large strategy studies with diverse recruitment and prospectively collected clinical data like START are important opportunities to explore operational, ethical and clinical science. This opportunity is balanced by the need to reduce complexity and excessive burdens on study personnel and participants.

STALWART evaluated whether intermittent interleukin-2 (rIL-2) alone or with ART around rIL-2 cycles increased CD4+ counts compared to no therapy. Patients ART-naïve (or off ART ≥ 1 year) with CD4+ T cells ≥ 300 /mm³ were randomized 1:1:1 to: rIL-2 alone, rIL-2 with peri-cycle HAART or no rIL-2 or ART (control). Following completion of the ESPRIT and SILCAAT studies all STALWART rIL-2 cycling was stopped and data were unblinded (January 27, 2009).

Results indicated that participants who received rIL-2 had higher CD4+ cell counts without significant change in viral load. A greater number of participants in the control group started continuous HAART and participants in the rIL-2 groups experienced a greater number of opportunistic events or death.

An amendment to the STALWART protocol was written to extend follow-up through February 28, 2011 with no rIL-2 to be given. Follow-up visits collect data to compare the following between the three groups: opportunistic events and death, CD4+ cell count, HIV RNA and commencement of HAART.

As at 29 May 2010, 33 of the 36 sites had ethics approval for the extended follow-up. Of the 256 participants at the 33 sites, 195 participants (76%) are currently under follow-up. Approximately 50% of the rIL-2 groups and 58% of the control group had commenced continuous ART and, as prior to the extended phase, participants in the rIL-2 groups experienced a greater number of opportunistic events or death.

Follow-up will continue as scheduled.

POSTER NUMBER:
PAPER NUMBER: 378

A TALE OF FIVE SUBSTUDIES: IN THE STRATEGIC TIMING OF ANTIRETROVIRAL TREATMENT (START) TRIAL

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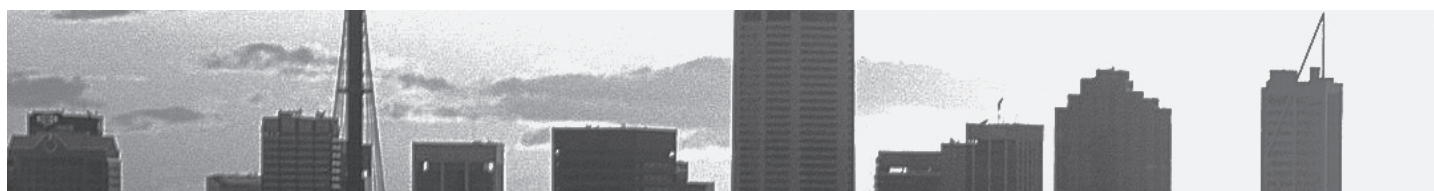
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POSTER NUMBER:
PAPER NUMBER: 748

EXTENDED SAFETY FOLLOW- UP OF STALWART: A STUDY OF ALDESLEUKIN WITH AND WITHOUT ANTIRETROVIRAL THERAPY

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

POSTER NUMBER:
PAPER NUMBER: 478

LIPID PROFILES IN HIV-INFECTED ADULTS RECEIVING ATAZANAVIR AND ATAZANAVIR/RITONAVIR IN RANDOMISED TRIALS: SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMISED CONTROLLED DATA

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Dyslipidaemia is common in HIV-infected individuals receiving antiretroviral therapy. Prospective data suggest dyslipidaemia accounts for approximately half the protease inhibitor risk for myocardial infarction.

We conducted a systematic review and meta-analysis of randomised controlled trials (RCTs) that compared regimens containing atazanavir (ATV) or atazanavir/ritonavir (ATV/RTV) with a comparator and evaluated lipids at 48 weeks. We searched MEDLINE, EMBASE, CENTRAL, LILACS, Current Controlled Trials, National Institutes of Health Clinical Trials Registry, trials at AIDSinfo and conference proceedings to May 2009. Standardised mean difference (SMD) between study arms in change from baseline to week 48 in lipid parameters was determined weighted by study size and 95% confidence intervals (CI) calculated. Predictors of total cholesterol SMD were assessed using meta-regression. Nine eligible RCTs were identified (n=3346). Lipids were lower in ATV/RTV regimens compared with boosted protease inhibitor (PI)/RTV regimens (4 RCTs): SMD (mmol/L) total (-0.62 [CI: -0.72, -0.51]), low-density lipoprotein (LDL) (-0.31 [CI: -0.44, -0.17]), high-density lipoprotein (HDL) (-0.16 [CI: -0.27, -0.06]), non-HDL cholesterol (-0.58 [CI: -0.69, -0.48]), and triglycerides (-0.46 [CI: -0.58, -0.34]). Lipid measures, other than HDL cholesterol, were lower in ATV compared to non-ATV regimens (3 RCTs) (SMD (mmol/L) total -0.87 [CI: -0.99, -0.76]; LDL -0.56 [CI: -0.67, -0.45]; non-HDL cholesterol -0.88 [CI: -0.99, -0.76]; triglycerides -0.56 [CI: -0.75, -0.36]), but HDL cholesterol did not differ (-0.16 [CI: -0.49, 0.16]). Total and non-HDL cholesterol were higher in ATV/RTV compared to ATV regimens (2 RCTs): SMD (mmol/L) 0.44 [CI: 0.23, 0.65] and 0.44 [CI: 0.23, 0.65] respectively, but HDL, LDL cholesterol and triglycerides were not different. No baseline characteristic predicted change from baseline to week 48 in total cholesterol levels.

At 48 weeks, plasma lipids were lower with ATV/RTV than other boosted protease inhibitor regimens. Total and non-HDL cholesterol were higher with ATV/RTV than ATV alone.

POSTER NUMBER:
PAPER NUMBER: 361

"CAN I C U IN 4-6 MTHS ?" "YES U CAN !" - HIV PATHOLOGY COSTS CONTAINMENT BY CD4 STRATIFICATIONS 2008-09 TO 2009-10

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The Gold Coast Sexual Health Service (GCSHS) performed approximately 40,000 – 50,000 pathology investigations per year, with > 50% are associated with HIV care. Like many public clinics, GCSHS has been facing escalating clinical costs in a severely constrained public health system. At the first quarter of 2008-09 financial year, it was confronted with a \$15,000 budget over-run in Pathology costs.

Urgent Pathology cost containment strategies were introduced, including one with reduced frequency of HIV reviews by CD4 stratification.

The number of HIV-associated pathology tests was reduced by reducing frequency of HIV review visits from a three monthly "standard-of-care" visit to visits based upon CD4 stratifications. For instance: patients with CD4 > 800 will only require a six monthly visit, whilst patients with CD4 between 300 and 800 would be seen on a four-monthly interval. A three-monthly visit is reserved only for patients who has a CD4 <300. Short-term effectiveness and safety of the strategy were assessed and tracked through trend reports which are based upon a number of "global" clinical HIV performance indicators (PI). These reports are systematically collated in the GCSHS clinical software: Specialized Health Information Program (SHIP V9).

Pathology cost over-runs were reduced to 14.2% of projected over-run at GCSHS in 2008-09 and is maintained through the 2009-10 financial year while clinical PI showed no significant changes over the same period, in:

- Crude death rate
- Median weight (Kg)
- % of HIV Patients with CD4 >500, 200-500 and <200 stratifications
- % of HIV patients with undetectable viral load (< 40 copies/ml or 1.6 log)
- % of HIV patients diagnosed with depression
- % of HIV patients identified as current smokers
- % of HIV Patients with hospitalisation

A drop of 40 cells in median CD4 counts was observed during the study period but is deemed insignificant as the laboratories standard variations ranged between 50-75 cells/ml.

GCSHS Pathology Cost containment strategy with reduced frequency of visits and number of HIV associated tests by CD4 stratification demonstrated a cost effective and safe short-term strategy. Long term safety remains uncertain and required on-going monitoring.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

Use of sdNVP to prevent perinatal HIV transmission results in a high rate of NVP resistance in women after delivery and may cause suboptimal response to subsequent NNRTI-based HAART. Use of HAART during pregnancy may reduce the chance of NVP resistance and provide better treatment response after delivery.

To compare treatment efficacy of NNRTI-based regimens between postpartum women receiving AZT and sdNVP or HAART for prevention of mother-to-child transmission of HIV(PMTCT).

Retrospective observational cohort study of HIV-1 infected women exposed to either AZT and sdNVP or HAART during pregnancy, and subsequently starting NNRTI-based HAART according to WHO guidelines with more than 12 months follow-up in Thailand. Samples collected at 4-8 weeks after delivery, at HAART initiation, and at 6 and 12 months after HAART initiation were tested for HIV RNA and genotypic resistance if HIV RNA was >1,000 copies/mL.

53 postpartum women with available HIV RNA results at 12 months of HAART were enrolled; 28 received AZT and sdNVP (sdNVPgr) and 25 received NNRTI-based HAART (HAARTgr) for PMTCT. Median ages at PMTCT (IQR) were 27(24-29.5) and 29(26-31) years, and median CD4 counts at HAART initiation were 179.5(151.5-207) and 185(146-215) cells/mm³ in sdNVPgr and HAARTgr, respectively. Patients in the HAARTgr initiated HAART earlier after delivery than patients in the sdNVPgr: median (IQR) 14.3(8.8-19.9) vs 31.9(23.9-45.1) months; respectively (p<0.001). After 12 months of HAART, all patients in the sdNVPgr were virologically suppressed. Twenty-one (84%) patients in the HAARTgr were virologically suppressed, and there were 3 virologic failures, in which at least three of the following mutations were identified at the time of failure: M184V, K103N, T69N, Y181I, T215Y, K65R, Y115F, Y181C, and G190A. None of the 3 cases had mutations detected 4-8 weeks after delivery or at HAART initiation.

The efficacy of NNRTI-based HAART at 12 months was good in postpartum women exposed to sdNVP or HAART for PMTCT. Both sdNVP and HAART groups, duration between PMTCT discontinuation and HAART initiation after delivery may have influenced virologic efficacy of NNRTI-based HAART in postpartum women. Ultrasensitive assays may help to detect major resistance mutations when initiating HAART in postpartum women with previous exposure to PMTCT regimens.

POSTER NUMBER:
PAPER NUMBER: 240

RESPONSE TO NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITOR (NNRTI)-BASED ANTIRETROVIRAL REGIMENS IN POSTPARTUM WOMEN EXPOSED TO ZIDOVUDINE (AZT) AND SINGLE-DOSE NEVIRAPINE (SDNVP) OR HIGHLY ACTIVE ANTI-RETROVIRAL THERAPY (HAART) DURING PREGNANCY FROM MTCT-PLUS PROGRAMS, THAILAND

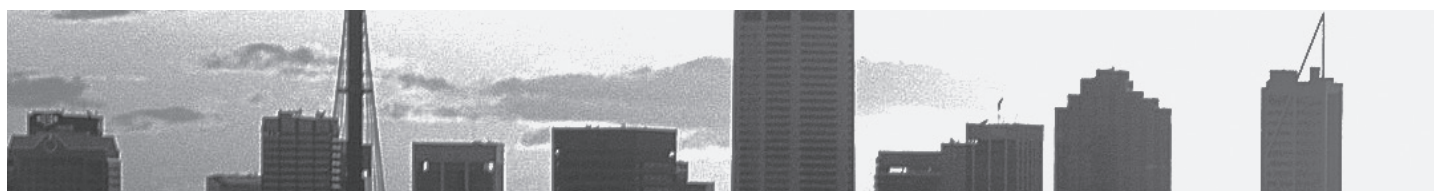
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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

POSTER NUMBER:
PAPER NUMBER: 507

ATTEMPTING SATISFACTION GUARANTEE :SURVEYING PEOPLE LIVING WITH HIV AND THEIR EXPERIENCE IN CLINICAL TRIALS.

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The success of clinical trials relies on the involvement of participants. The knowledge of participants' satisfaction with their experience in trials has not been fully explored. Little data exists regarding satisfaction with clinical trial participation for people living with HIV. In 2009, we developed a questionnaire that aimed to assess the experience and level of satisfaction of people living with HIV whilst enrolled in a clinical trial.

The aim is to approach approximately 170 study participants attending one of five study sites, comprising of 1 hospital outpatient clinic, 3 high HIV case load General Practice clinics and 1 sexual health clinic over a three month period May to July 2010.

The aim of the study is explained to participants when they are given the questionnaire. Only those participants who are either currently enrolled in a study or have been involved in one in the last 2 years are approached to complete the questionnaire. They are informed that their responses are anonymous and will remain private and confidential. The questionnaire was designed to take about 5 to 10 minutes to complete. Once completed the participants are asked to return the questionnaire into a sealed box in clinic or via a pre-paid sealed envelop.

To date we have had 80 questionnaires returned. Their responses have covered the level of satisfaction of their trial experience encompassing 4 stages of trial involvement: why they enrolled, entry procedures into the study, during the study and post study experiences. There have also been generalized comments of trial experiences expressed. Information gained from further completed and analysed questionnaires will hopefully enhance future trial recruitment and retention of participants.

POSTER NUMBER:
PAPER NUMBER: 587

ASSOCIATION BETWEEN LOW 25(OH) VITAMIN D LEVELS, ANTI-RETROVIRAL THERAPY AND METABOLIC PROFILE IN A COHORT OF TREATED AND THERAPY NAÏVE HIV POSITIVE PATIENTS IN WESTERN AUSTRALIA

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Vitamin D has well known effects on bone metabolism but there is increasing evidence for its role in immune regulation and cardiovascular risk. Although vitamin D deficiency is common in Australia and HIV populations in the developed world, epidemiological data surrounding 25-OH vitamin D levels (25(OH)D) and associated factors in Australian HIV patients is limited.

A cross-sectional audit was conducted on 266 HIV positive patients in the Western Australian cohort looking at the prevalence of and co-variables relating to 25(OH)D deficiency. Log-transformed measures of 25(OH)D were analysed via linear regression modelling.

Our studied cohort was predominantly male 209/266(79%) and on antiretroviral therapy (ART) 193/266(73%). More than 30% of individuals had pigmented skin (6% Indigenous Australians, 11% African, 7% South-East Asian, 6% Indian and 3% other Asian/Melanesian). 200/266 patients (75%) had insufficient 25(OH) D levels (<75nmol/L) and 44/266 (17%) deficient 25(OH)D levels (<30 nmol/L). Consistent with published literature, 25(OH) D levels of pigmented patients were considerably lower than those of white Caucasians (mean reduction of 38%, p<0.0001). Seasonal effects on 25(OH) D levels were also observed: compared with winter, measures obtained in spring were 4% higher (p=0.6), in summer 19% higher (p=0.07) and in autumn 34% higher (p=0.001). Independent of pigmentation and season, neither current ART regimen (p=0.5) or duration of therapy (p=0.5) were associated with differing 25(OH) D levels (p=0.5). However, particular treatment effects noted included current tenofovir-containing ART (associated with 21% increase in 25(OH) D, p=0.01) and current efavirenz-containing regimens (associated with 19% decrease in 25(OH) D levels, p=0.009). Although there was no association between 25(OH) D and BMI (p=0.4), lower 25(OH)D levels were associated with higher fasting insulin (p=0.04) and fasting triglyceride levels (p=0.0002).

Our study confirms the high prevalence of 25(OH)D deficiency in treated HIV patients and the expected strong effect of pigmented race and seasonality. Specific treatment effects observed that may arise from ART effects on vitamin D metabolism and the association between lower 25(OH)D and metabolic parameters warrant further investigation.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

Background

Predictive biomarkers of disease progression include HIV RNA level in plasma (viral load) and CD4 cell count (immune function). In resource-limited settings, access to these disease staging diagnostics has lagged behind the availability of antiretroviral therapies. Monitoring of patient status via surrogate markers, to identify optimal therapy initiation and switch periods, is not routinely available at a level comparable to developed economies. Currently, there is little data on how the lack of economic and monitoring resources impact upon patient treatment outcomes.

Methods

Analyses were based on 2333 patients initiating highly active antiretroviral therapy (HAART) from 2000 onwards. Sites were categorised by World Bank country income criteria (high/low) and annual frequency of VL ($\geq 3/1-2/<1$) or CD4 ($\geq 3/<3$) testing. Endpoints were time to AIDS or death and change in CD4 count and VL suppression (< 400 copies/ml) at 12 months. Demographics, CDC classification, baseline VL/CD4 counts, hepatitis B/C coinfections and HAART regimen were covariates. Time to AIDS or death was analysed by multivariate proportional hazards models. CD4 and VL endpoints were analysed using multivariate linear and logistic regression, respectively.

Results

Increased disease progression was independently associated with site-reported VL testing <1 /year [hazard ratio (HR)=1.4; $p=0.032$], CDC stage C infection (HR=1.4; $p=0.003$) and hepatitis C coinfection (HR=1.8; $p=0.011$). A total of 1120 (48.2%) patients had change in CD4 count data. Smaller increases were associated with older age ($p<0.001$) and "Other" HIV source exposures including IDU and blood products ($p=0.043$). VL suppression analyses included 785 (33.7%) patients. Patients from sites monitoring VL <1 /year [odds ratio (OR)=0.30; $p<0.001$] and reporting "Other" HIV exposures experienced reduced suppression (OR=0.28; $p<0.001$).

Conclusion

Less than annual site-reported VL testing is associated with less favourable patient outcomes, in particular, a 35% increased risk of AIDS or death. Outcomes for patients at sites reporting VL testing of 1-2 times annually did not differ substantially from patients at sites reporting more frequent monitoring. Our findings emphasise the need to partner the expanded international access to HAART with appropriate levels of VL monitoring.

POSTER NUMBER:

PAPER NUMBER: 345

FREQUENCY OF SITE-REPORTED VIRAL LOAD MONITORING PREDICTS HIV DISEASE PROGRESSION FOLLOWING HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART).

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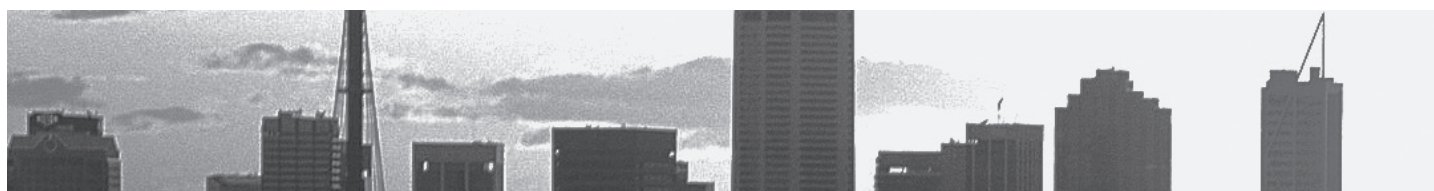
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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

POSTER NUMBER:
PAPER NUMBER: 819

IMPACT OF ANTIRETROVIRAL CLASS ON CD4+ T-CELL CHANGES AND CLINICAL OUTCOMES IN ESPRIT (EVALUATION OF PRO-LEUKIN® IN AN INTERNATIONAL TRIAL).

Pett SL^{1,2}, Wand H¹, Kedem E³, Markowitz N⁴, Goetz M⁵, Mathiesen L⁶, Cooper DA^{1,2}, Law M¹, Emery S¹ on behalf of the INSIGHT/ESPRIT Study Group.

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In the ESPRIT study greater CD4+ increases with interleukin-2 plus combination antiretroviral therapy (cART) (IL-2 arm) vs. cART (control arm) conferred no clinical benefit. Protease inhibitor (PI) use has been associated with greater CD4+ gain than non-nucleoside reverse transcriptase inhibitor (NNRTI) use in some studies. We wished to explore whether the magnitude of CD4+ change in the IL-2 arm was different in PI vs. NNRTI users, and if it was, whether this translated into a difference in clinical events.

To explore associations between antiretroviral class and CD4+ change and clinical events in ESPRIT.

Cox models were used to estimate hazard ratios (HR) associated with PI vs. NNRTI on risk of POD/AIDS-death, deaths and SNA overall and by randomised arm.

Of 3169 patients, 48% were NNRTI and 52% PI treated. Mean age was 41years, 84% male, 6% and 13% with hepatitis B (HBV) and C (HCV) respectively; HIV-duration 6.9yrs; 26% Category C, baseline CD4+ 501 cells/μL; ART-duration 4.6yrs, plasma HIV RNA 2.18 log₁₀cp/mL. Over an 8yr period, PI vs. NNRTI-users (IL-2 arm) gained 108 and 113 cells/μL (p=0.513) respectively, while PI vs. NNRTI-users (control arm) gained 36 and 35 cells/μL (p=0.914). PI-users experienced progression to AIDS (POD)/AIDS-death and death more rapidly than NNRTI-users in the IL-2 arm (p=0.01 and p=0.035 respectively); this association was not seen in the control arm. In addition, overall, the time to serious non-AIDS (SNA)-events (cardiovascular, hepatic, renal, malignancy) was shorter among PI-users than NNRTI-users (p=0.03). In multivariate analyses (including PI/NNRTI as covariates), HR for POD/AIDS-death were older age (HR1.32,p<0.0001), prior POD (HR1.45,p=0.0077), HCV (HR1.68,p=0.0023), higher CD4+(HR0.79,p<0.0001) and VL<500cp/mL (HR0.43,p<0.0001). HR for death were older age (HR1.47,p<0.0001), HCV (HR2.29,p<0.0001), higher CD4+ (HR0.78,p<0.0001) and VL<500cp/mL (HR0.51,p<0.0001). Adjustment for baseline/on-study covariates negated any PI-IL-2 interaction (p=0.303 and 0.537 for POD/death from AIDS and death respectively). HR for SNA were older age (HR1.48,p<0.0001), longer HIV-duration (HR1.20,p=0.014), HBV (HR1.86,p=0.006), higher CD4+ (HR0.92,p=0.0047) and female gender (HR0.45,p=0.0147).



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

The clinical management of asymptomatic HIV-infected patients with CD4+ counts >500cells/μL presents controversies. The absence of randomised clinical trial data has meant treatment guidelines are based entirely on expert interpretation of data from observational cohorts. Consequently, the true risk/benefits for starting or deferring treatment with antiretroviral therapy (cART) are not completely understood. On one hand, are the known side effects of cART and the possibility that long term exposure could cause other as yet undescribed toxicities. On the other hand, there is increasing evidence that even at higher CD4+ cell counts there is a discernable excess of morbidity and mortality associated with unchecked HIV replication due largely to serious non-AIDS (SNA) (i.e. cardiovascular, renal, hepatic, malignancy conditions). The relative contributions of cART and HIV to the pathogenesis of SNA conditions is currently unknown.

The objective of START is to determine whether immediate ART delays time to serious AIDS, serious non-AIDS or death when ART is initiated at CD4+ count >500cells/μL (immediate ART) vs. deferral until CD4+ is ≤350cells/μL (deferred ART) in asymptomatic HIV-1-infected adults.

START is an International, open-label, randomised trial. The choice of the randomised comparison gives substantial difference between the groups in ART exposure and utilises the standard-of-care indicated by most ART-guidelines. START will randomise a heterogeneous population (sites on 6 continents) to enhance the generalisability of the findings. The rationale for the composite endpoint is to capture all clinical endpoints particularly SNA events, that impact detrimentally on health at higher CD4+ counts.

Sample size was calculated using cohort and randomised data (SMART study) to model events at different CD4+ strata. Enrolment of 4000 patients followed over ≈4.5 years will give 90% power (two-sided α=0.05) and ensure adequate power for the separate components of the composite primary endpoint. The primary analysis (intention-to-treat) will compare immediate vs. deferred ART with respect to time to first onset of serious AIDS/SNA using Kaplan-Meier plots, logrank test and a Cox PH model stratified by region of enrollment.

The findings of the START study will be pivotal, providing robust randomised controlled data on the clinical benefits of starting ART at higher CD4+ T-cell counts.

Cerebral function impairment remains problematic in subjects with chronic HIV infection despite effective combination antiretroviral therapy (cART).

Using cerebral proton magnetic resonance spectroscopy (¹H MRS), we aimed to determine if abnormalities could be detected in neurologically asymptomatic HIV-infected subjects electively commencing cART. Therapy-naïve, HIV-infected individuals (immediately prior to commencing cART) and HIV-uninfected controls underwent ¹H MRS in several anatomical voxels including the mid-frontal grey matter (FGM) and right basal ganglia (RBG). Differences in cerebral metabolite ratios between groups and correlations between immune and virological status were assessed.

Forty-six subjects were recruited (26 HIV-infected and 20 control subjects). In the HIV-infected group, mean CD4+ count (SD, cells/μL) and plasma HIV-RNA (SD, log₁₀ copies/mL) were 192 (86) and 4.71 (0.64), respectively. Choline (Cho)/Creatine (Cr) and myo-Inositol (MI)/Cr ratios were significantly lower in the FGM in HIV-infected subjects compared to controls (0.67 (0.14) versus 0.88 (0.49), p=0.036 and 0.94 (0.28) and 1.17 (0.26), p=0.008 for Cho/Cr and MI/Cr, respectively) and Cho/Cr ratio associated with CD4+ lymphocyte count (p=0.041). N-acetylaspartate (NAA)/Cho ratio was significantly lower in the RBG in HIV-infected subjects compared to controls (2.27 (0.54) versus 2.63 (0.68), p=0.002) and this was associated with greater plasma HIV RNA load (p=0.014).

Two patterns of cerebral metabolite abnormalities were observed in HIV-infected subjects electively commencing cART. Changes in inflammatory metabolite ratios (Cho/Cr and MI/Cr) associated with peripheral immune markers (CD4+ lymphocyte count) in the FGM and changes in neuronal metabolite ratios (NAA/Cho) associated with HIV viraemia in the RBG, were present in HIV-infected subjects.

POSTER NUMBER:
PAPER NUMBER: 50

CONSIDERATIONS IN THE RATIONALE, DESIGN AND METHODS OF THE STRATEGIC TIMING OF ANTIRETROVIRAL TREATMENT (START) TRIAL

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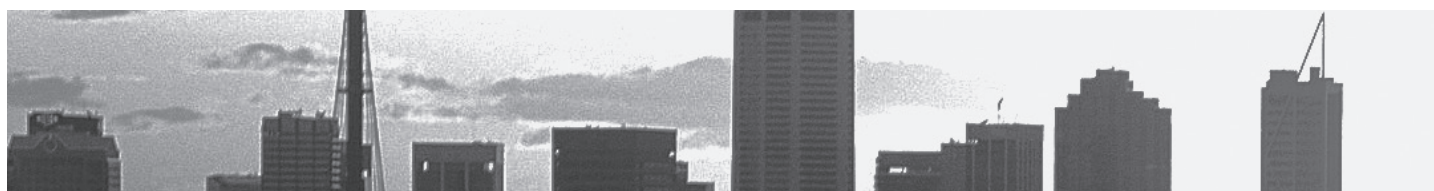
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POSTER NUMBER:
PAPER NUMBER: 797

TWO PATTERNS OF CEREBRAL METABOLITE ABNORMALITIES ARE DETECTED ON PROTON MAGNETIC RESONANCE SPECTROSCOPY IN HIV+ SUBJECTS ELECTIVELY COMMENCING ART

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THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

POSTER NUMBER:
PAPER NUMBER: 539

CLINICAL AUDIT OF PHYSICIAN ADHERENCE TO NATIONAL GUIDELINE RECOMMENDATIONS FOR CARDIOVASCULAR DISEASE (CVD) AND RENAL DISEASE SCREENING AND RISK FACTOR MANAGEMENT.

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Introduction: To evaluate adherence of Australian HIV physicians to national guidelines regarding screening and management of cardiovascular and renal disease amongst their HIV infected patients.

Methods: Two rounds of internet-based data collection will be conducted six months apart. An educational intervention will be undertaken to improve awareness of and adherence to the national guidelines. Follow up data collection will assess the effectiveness of the education intervention. Primary care physicians (n=43) will report information relating to the screening and management of the cardiovascular and renal health of their HIV infected cohort. Here we report the characteristics of the baseline data set.

Results: Data are available for 530 patients. Patient demographics demonstrated a high proportion of patients with an adverse vascular risk profile including; 93% male; 30% aged 50 years and over, 38% were smokers. 5% had diabetes mellitus, 5% obesity and 20% were hypertensive (64% taking antihypertensive agents); 32% were hyperlipidaemic (45% taking lipid lowering agents), 6% had known cardiovascular disease (CVD), 10% also exhibited a strong family history of cardiovascular disease. Of these patients the majority (87%) were Caucasian, 6% were coinfecting with Hepatitis C (HCV) and 83% were on antiretroviral therapy. Adherence to screening and risk factor management guidelines is reported below:

Blood glucose measured within the last 12 months 83%; Sitting blood pressure taken within last 12 months 88%; Plasma lipid profile performed within last 12 months 87%; Electrocardiograph (ECG) performed since HIV diagnosis 25%; CVD risk calculated since diagnosis 17%; CVD risk calculated annually 4%; dipstick urinalysis performed since HIV diagnosis 48% (12% showed proteinuria by dipstick); estimated glomerular filtration rate (eGFR) performed since HIV diagnosis 96% (3% demonstrated an eGFR <60).

Conclusions: This audit demonstrates a high burden of CVD risk and moderate renal disease risk in the Australian HIV-infected population. The current screening and management practices fall short of suggested national guidelines.

POSTER NUMBER:
PAPER NUMBER: 546

A POSSIBLE SOLUTION FOR ENSURING ACCURATE CD4 ENUMERATION IN PNG, THE PACIFIC AND S.E. ASIA

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In 2009 the Australasian Flow Cytometry Group (AFCG) officially endorsed the establishment of a volunteer group, AVoCA (AFCG Volunteers for Cell Assessment). The principal and immediate aim of this volunteer group is to ensure that local technicians in Papua New Guinea (PNG), the Pacific and SE Asia are able to deliver accurate CD4 counts on patients living with HIV to ensure that they receive anti retroviral therapy in a timely manner.

This will be achieved by training volunteers in this country by conducting hands-on workshops using the same equipment used in these countries, sending volunteers to centres to train technicians, bringing technicians from PNG and other nations for further training so that they can become in-country trainers themselves, establishing links between local and overseas flow cytometry technicians and establishing a network between aid providers, instrument manufacturers and government agencies both local and abroad.

Achievements so far include one Train the Trainer workshop held in Sydney in 2009 at BD Biosciences for local volunteers, the organisation of a one-day workshop on CD4 counting in Resource Poor Nations in Brisbane 2009, the funding and provision for 7 laboratory personnel from PNG to attend the AFCG Scientific Meeting, the QIMR Flow Cytometry Methods Course and the one day CD4 workshop in Brisbane 2009. Linkages have been established with BD Biosciences, Partec Healthcare, the Clinton Foundation (PNG), the Central Pathology Health Laboratories in Port Moresby, PNG Enclaves Project and CSIRO International. Through these links we aim to have a formal relationship with AusAID by the end of this year.

Although the aims of this group appear to be narrow we believe that by focussing on a small but vital area we can achieve a favourable outcome within a relatively short timeframe.





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

Guangxi is the fifth poorest province and has the second highest burden of HIV infection in China. In December 2003, Médecins Sans Frontières (MSF) in collaboration with the Guangxi Centre for Disease Control (CDC) opened a free HIV treatment and care project in Nanning, Guangxi Province. Patients are followed prospectively in an observational cohort.

Retrospective analysis of routinely collected data from December 2003 to December 2009. This analysis is based on data collected from FUCHIA software (Follow-up and Care of HIV Infection and AIDS).

A total of 93 children (<15 years old) were ever registered in the project. 83 children were ever started on ART. At ART initiation, 9.6 % (8) were less than 12 months, 68.7% (57) between 1 and 5 years old, and 21.7% (18) between 5 and 15 years old. 72.5% (58) were stage 3 or 4. At the end of December 2009, 72.3% (60) of children were alive and under followed-up, 13.3% (11) had died, 13.3% (11) were transferred out, 1.2% (1) were lost to follow-up, and 6 (7.2%) were on second line ART regimen.

Despite the lack of pediatric fixed drug combinations, the complexity in administering ART regimens for children, and the multiple care givers involved in the child's HIV care, the project achieved satisfactory results. The key success of this project is a child and caregiver centered approach with a focus on pediatric counseling and free care.

Guangxi is the fifth poorest province and has the second highest burden of HIV infection in China. In December 2003, Médecins Sans Frontières (MSF) in collaboration with the Guangxi Centre for Disease Control (CDC) opened a free HIV treatment and care project in Nanning, Guangxi Province. Patients were followed prospectively in an observational cohort.

Retrospective analysis of routinely collected data from December 2003 to December 2009 was performed. This analysis was based on data collected from FUCHIA software (Follow-up and Care of HIV Infection and AIDS, Epicentre).

A total of 1674 patients were ever registered in the cohort including 156 children, 36.3% were female and 63.7% male, and 1116 patients were initiated on ART including children. At the end of December 2009, 67.4% of patients on ART were still followed, 9.7% (108) were dead, 16.3% (182) were transferred out, and 4.4% (49) were lost to follow-up. In July 2009 routine viral load monitoring for patients on ART for more than 1 year was introduced in Guangxi province. Out of 622 viral loads performed from July until December 2009, 29 patients (4.7%) had a viral load >1000. Out of a total of 1118 adults and children who were commenced on ART since the project began, 35 (3.1%) were switched to a second line regimen.

The key success of this long term project is the constant attention to a patient centered approach including patient friendly attitude, integration of medical and counseling activities and free comprehensive HIV care, compared to more traditional models of ART delivery in China.

Jack is a healthy 50 year old man. He was diagnosed with HIV since 1982, thus has been living with the diagnosis of HIV for the last 27 years. The diagnosis of HIV has been confirmed many times with HIV serology total Ab screen and Western blot, reactive for HIV 1. He has never been involved with HIV vaccine trials. Since diagnosis he has never been on antiretroviral therapy. He always has undetected viral load and HIV proviral DNA studies- DNA not detected.

POSTER NUMBER:
PAPER NUMBER: 687

PAEDIATRIC OUTCOMES OF A 6-YEAR HIV PROJECT IN NANNING, GUANGXI PROVINCE, CHINA

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POSTER NUMBER:
PAPER NUMBER: 691

OUTCOMES OF A 6-YEAR HIV TREATMENT AND CARE PROJECT IN GUANGXI PROVINCE, CHINA

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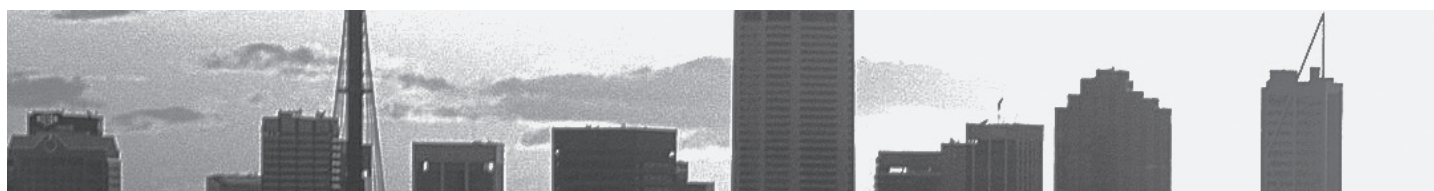
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POSTER NUMBER:
PAPER NUMBER: 244

CASE REPORT- A VERY UNUSUAL HIV CASE

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Nambour, Australia



THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

THEME B: TREATMENT AND MONITORING - CLINICAL STUDIES

POSTER NUMBER:
PAPER NUMBER: 568

SEASONAL DIFFERENCES IN VITAMIN D LEVELS IN AN HIV POSITIVE COHORT

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Prevalence of Vitamin D deficiency has been found to be relatively high in HIV positive patients. Hand in hand with this, rates of osteopenia and osteoporosis are much higher than seen in the general population. There are a number of purported reasons for this related to the virus itself and antiretroviral therapy (ART). Seasonal difference in Vitamin D levels has not always been taken into account in studies to date. This study was conducted to observe seasonal differences in Vitamin D levels of HIV positive patients of a large caseload private practice in Sydney. We also present data on effect of supplementation, prevalence of deficiency and associated use of ART.

A record based retrospective study was conducted. All HIV positive patients at the practice who had Vitamin D levels measured in both summer and winter with measurements within 12 months were included.

78 eligible HIV positive patients were included. 28% were taking a Vitamin D supplement. We found a highly statistically significant difference between summer and winter values. The summer mean was 66.13 nmol/L compared to the winter mean of 43.7 nmol/L ($P < 0.0001$). Higher Vitamin D levels were detected in those patients who were not taking a supplement and this difference was found to be prominent in winter ($P = 0.018$).

Conclusion : The season in which Vitamin D levels are measured should be taken into account. With levels of above 80 nmol/L required for optimal bone health most participants in this study are deficient and at risk of developing osteoporosis. This highlights the need for increased testing of levels and supplementation.

POSTER NUMBER:
PAPER NUMBER: 388

SERUM IMUNOGLOBULIN E (IgE) LEVEL IN HIV / AIDS PATIENT WITH VARIOUS IMMUNE LEVEL

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Nowadays, Human Immunodeficiency Virus (HIV) has become an endemic. As HIV infection worsens, the same happens to CD4 T lymphocyte amount. In that condition, the patient will suffer from ever degrading level of immunity. Aside from numerous opportunistic infections, allergy manifestation also increases. Positive result of prick test in HIV suggest that IgE level in HIV patient is higher than healthy control. Certain scientist think of IgE serum level as surrogate marker in CD4 count of HIV patients.

Attempting to study description of IgE serum level, CD4 T lymphocyte level (status of immunity) and complimentary conditions such as allergy manifestation, demographic data, transmission pattern, opportunistic infection, nutritional status, in HIV patient with various level of immunity.

This study enrolls descriptive type in 63 initially diagnosed patients with HIV-AIDS in outpatient Clinics HIV Unit from July to October 2009.

Patients with HIV/AIDS in study enrollment have average result of IgE 865,33 \pm 922,15. Lowest level of IgE 5,6 and highest of 2500. In terms of normal or high categories, 19% is normal, and 81% in increased status. While allergy manifestations such as Rhinitis, Pruritus, Drug allergy such as Steven Johnson Syndrome, Allergic Dermatitis urtikaria were found in 9,50%, 6,30%, 3,20%, 3,20%, 1,60% and 1,60% respectively. IgE result in this category is lowest in 573,3 IU/ml, with the highest of 2500 IU/ml with average serum IgE of: 1709,13 IU/ml. While average CD4 is lower, and appropriately classified as severe immunodeficient. The lowest CD4 is 8/ml, and the highest of 256/ml, with average of 100,06/ml. Relationship between CD4 and IgE level is explained in diagrams and serum IgE level as well. The higher level of CD4, the lower IgE level. With $r = 0,63$ which gave impression of strong relationship between decreased CD4 which show decreasing immunity status and increase of serum IgE. HIV patients with Allergic manifestation have higher averaged IgE level (1709,13 IU/ml) compared with those without aforesaid manifestations (578,08 IU/ml). While CD4 is lower (100,06/ml), and noted as severe immunodeficiency condition.

In patients with HIV-AIDS, we found the lower immunity status (CD4 level) the higher serum IgE level. And allergic manifestation which emerged, happened in decreased immunity status and





THEME B: MANAGING HIV: CLINICAL MANAGEMENT AND THE LIVED EXPERIENCE OF HIV

TREATMENT AND MONITORING - CLINICAL STUDIES

HIV and AIDS have been the global health concern nowadays. It has spread out all over the world including Indonesia, with increasing rate of incidence and mortality rate. By the end of 2005, the number of patients infected by HIV and AIDS is predicted 90.000-130.000. It is projected that around 400.000 patients develop AIDS and 100.000 lives die of HIV in 2010.

To know dominant factors influencing mortality of AIDS patients at infectious tropical disease ward and UPIPI of Dr. Soetomo Hospital.

This is an observational analytic a backward prevalence study design. Data were taken from patient's medical record met inclusion criteria from 1st January 2001 until 31 December 2005.

There were 131 patients (36.5 %) met inclusion criteria with mortality of 75 patients (57.3%) from 358 hospitalized HIV patients during period of 1 January 2005 until 31 December 2005. There were no association between age, tuberculosis infection, oral candidiasis infection and mortality of AIDS patients. There were significant correlations between mortality and severe anemia ($p=0.037$, $OR=5.214$, $95\%CI=1.301-8.338$), low TLC levels ($p=0.037$, $OR=5.214$, $95\%CI=1.040-26.154$) and severe hypoalbuminemia ($p=0.0001$, $OR=4.190$, $95\%CI=1.915-9.170$) by using univariate correlation analyses. Based on double logistic regression analysis, there were marked association between severe anemia and mortality ($p=0.036$, $OR=2.802$, $95\%CI=1.065-7.370$), and between severe hypoalbuminemia and mortality ($p=0.001$, $OR=3.826$, $95\%CI=1.724-8.492$)

This study concludes that anemia and hypoalbuminemia are mortality predictors of AIDS patients.

Genetic variation can account for some of the marked inter patient variability with adverse events and therapeutic response. Genotyping for the CYP2B6 alleles has the potential to assist clinicians in tailoring efavirenz containing regimens.

A 48 year old black Kenyan man with recently diagnosed, advanced HIV and pulmonary Mycobacterium Tuberculosis (M.TB) infection presented to our unit with an acute deterioration in his mental and cognitive state with marked hallucinations and ataxia.

He had inadvertently taken three times the recommended standard dose of Atripla® (co formulated efavirenz/emtricitabine/tenofovir) for three days.

The severity of his neurological presentation and plasma cmin levels of 21,478ng/ml (normal 1000-4000ng/ml) despite concurrent use of rifampicin for MTB prompted further investigation. This revealed the CYP2B6 516 TT polymorphism.

We report on the successful novel approach in tailoring his regimen to a "six days on/one day off" regimen. Guided by therapeutic drug monitoring, which has maintained excellent virological control, immune recovery and minimised drug toxicity.

higher serum IgE level.

POSTER NUMBER:

PAPER NUMBER: 391

PREDICTORS OF MORTALITY IN HOSPITALIZED AIDS PATIENTS

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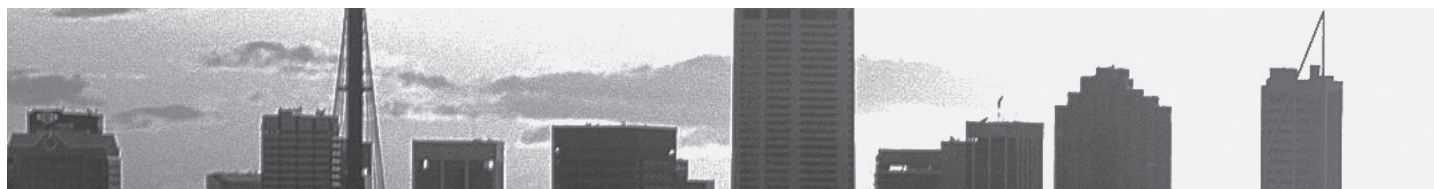
POSTER NUMBER:

PAPER NUMBER: 777

PHARMACOGENOMICS AND INDIVIDUALISING ANTIVIRAL THERAPY: ATRIPLA® DOES NOT MEAN THREE TIMES PER DAY!

Varma R, Hourihan M, Ramogi M

Colchester University Foundation
Trust, Essex, England.



THEME C: PREVENTING HIV

THEME C

POSTER NUMBER:
PAPER NUMBER: 475

MAPPING PENILE CUTTING AND INSERT PRACTICES IN PAPUA NEW GUINEA

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Male circumcision has been shown to prevent HIV acquisition in men in large-scale clinical trials conducted in Africa but the acceptability of this intervention, the socio-cultural context into which it would be introduced and its potential epidemiological impact remain unclear in other settings. Anecdotal evidence suggests penile cutting, penile inserts and other practices may be common in Papua New Guinea (PNG) due to a complex interplay between traditional and contemporary influences, practices and beliefs. This study was conducted to map penile practices and the socio-cultural dimensions underpinning these practices in PNG.

A multi-method qualitative research study was undertaken in four diverse social and geographical locations: National Capital District; Eastern Highlands, East Sepik and West New Britain Provinces. Study participants were identified by iterative, purposive sampling following interviews with key local stakeholders and community members at each study location.

A total of 133 semi structured in-depth interviews and focus group discussions were conducted with men and women in four locations. Penile practices could be categorized into five broad themes: traditional penile cutting (associated with male initiation ceremonies and conducted with the support and involvement of men and women from the local community); contemporary penile cutting (conducted without associated ceremonial practices and in the absence of community support or engagement); medical circumcision (carried out by trained health workers at designated health facilities); the insertion of foreign objects into the foreskin, foreskin remnant (following traditional or contemporary penile cutting or medical circumcision) or into the skin of the penile shaft ('penile inserts'); urethral blood-letting practices in which sharp objects are inserted and withdrawn from the male urethra to induce bleeding ('penile shooting'). Longitudinal dorsal slit was the most common form of penile cutting reported in all locations, typically resulting in a flap of foreskin left to hang below the penile shaft or a 'V' shaped dorsal foreskin defect ('V' cut).

Penile cutting and insert practices are diverse in their nature, scope, socio-cultural dimensions and motivators in PNG. These factors are likely to be critical to the future acceptability and uptake of medical circumcision if implemented for HIV prevention in PNG





THEME C: PREVENTING HIV

Background

In 2006, the Health Promotion Board (HPB), in collaboration with the Ministry of Health (MOH) and the Ministry of Education (MOE), developed a new school-based STI/AIDS prevention programme titled "Breaking Down Barriers", targeted at Secondary 3 students (aged 15 years old). The programme, implemented in all secondary schools since 2007, comprises a mass education component, followed by classroom sessions. The former utilizes multi-media, humour, and real-life testimonies to impart information on modes of transmission of and protection against STI/AIDS while the latter focuses on lifeskills namely decision-making, assertiveness and negotiation, to enable students to resist pressure to have sex.

Methods

Evaluation of the programme was conducted from 2007 to 2008. It involved some 3,000 students from 20 schools. The schools were randomly selected to best represent the different types of schools in the Singapore education system. Students involved were given self-administered pre- and post-programme questionnaires to assess their knowledge levels as well as their perceived susceptibility to STI/AIDS.

Results

After attending the programme, more students were aware of the main modes of STI/HIV transmission and the modes of protection against infection. For example, significant differences were observed for "casual sex" as a mode of transmission of STI/AIDS (Pre: 87%; Post: 93%) and for "abstinence" as a mode of protection against infection (Pre: 44%; Post: 53%). Students were also more aware of the misconceptions associated with HIV/AIDS transmission e.g. fewer students chose "mosquito bites" as a mode of HIV/AIDS transmission (Pre: 19%; Post: 9%) after attending the programme. In addition, students were more likely to perceive themselves as being vulnerable to STI/AIDS after the programme.

Conclusions

"Breaking Down Barriers" has been shown to be effective at increasing the knowledge levels of students with regard to STI/AIDS transmission and its prevention. It has also impacted on students' perceived susceptibilities towards STI/AIDS.

POSTER NUMBER:

PAPER NUMBER: 239

BREAKING DOWN BARRIERS: AN STI/AIDS PREVENTION PROGRAMME IN SECONDARY SCHOOLS IN SINGAPORE

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THEME C

In Bandung, Indonesia, the number of people living with HIV/AIDS (PLHIV) and injecting drug users (IDU) in prisons continues to increase while inmates have limited access to information about HIV/AIDS. In addition, inmates receive minimal emotional and moral support from prison authorities. Therefore, the role of community-based organizations (CBO) to support those who are in prison is absolutely essential. Support must be offered both to inmates who are still using and to those who are clean, to enhance their moral and mental awareness and to provide soft skills to control their emotions.

Based on my past experience as a Case Manager at Rumah Cemara, inmates who have less involvement in support groups lack the confidence required to avoid risky behavior that leads to HIV infection when they leave prison. The existence of support groups in prisons is not yet strong because the members are afraid to be known and afraid that they will be discriminated against by other inmates or prison wardens.

Rumah Cemara currently supports one PLHIV support group in Banceuy Prison, Bandung. With help from our Case Managers, the first 10 members of the group advocated the importance of a peer support groups to the prison officers, and the group now has developed into 25 members of PLHIV and affected people. All of the members are inmates of the prison and are no longer afraid to disclose their status nor the existence of their group.

Peer support groups in prison can enhance moral awareness and mental health of inmates during their sentence period. PLHIV and IDU in prison can be more open with other inmates and provide peer support to encourage others to seek voluntary counseling and testing (VCT) for HIV. Those who are already in the group feel more comfortable and confident to live a low-risk lifestyle when they leave prison.

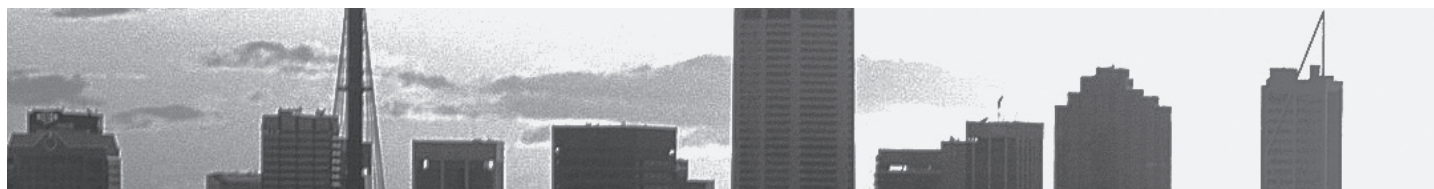
POSTER NUMBER:

PAPER NUMBER: 108

COMMUNITY BASED APPROACH FOR PLHIV AND IDU IN BANCEUY PRISON, BANDUNG

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THEME C

POSTER NUMBER:
PAPER NUMBER: 665

INFANT FEEDING NETWORKS AND HIV PREVENTION IN EAST AFRICA

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Infant feeding in East Africa is generally not the exclusive responsibility of mothers. This creates a challenge for mothers, families and services seeking to prevent HIV transmission to infants. Numerous studies have explored the influence of fathers, grandmothers and other family or community members on decisions to breastfeed or not in resource-poor countries. In the collective African social context these are best understood as networks of influence.

The concept of infant feeding networks emerged from a study which explored the role of social ties in preventing post-natal transmission of HIV to infants. 20 key informants and 10 HIV-positive mothers and their relatives were interviewed. 13 focus group discussions were conducted with community members in Central Tanzania.

Infant feeding networks are illustrated through several cases of HIV-positive African mothers. Study results demonstrate how a number of connected people, including the mother, are directly involved in decisions about infant feeding according to perceived collective responsibilities for child feeding. These people may influence an infant's intake through cultural practices ranging from actual feeding, to supplying milk or giving advice. These networks vary in size and composition, and their strength of influence varies, increasing during stages or situations when mothers are dependent.

An important finding is that networks of influence are constantly changing. Disclosure of a mother's HIV status may lead to negative or positive changes according to how people accept or shed their responsibilities. Major active roles of people closely tied to HIV-infected mothers are to supply or arrange access to local trusted replacement milk, and protect mothers from stigmatising attitudes resulting from using such milk. Without accepting awareness of a mother's HIV status, interactive effects within networks can lead to unhelpful support, such as mixed feeding or social pressure on mothers to breastfeed.

The concepts of infant feeding networks, risk networks, trust and disclosure networks contribute to understanding the influence of social ties on infant feeding and HIV prevention in collective, resource-poor societies like Tanzania. They also hold promise for communicating recommendations for network and community-level approaches in HIV prevention.





THEME C: PREVENTING HIV

in HIV management in recent decades have caused a gradual shift in focus from acute management to longer term health maintenance strategies. It has long been recognized that reducing the role smoking plays in the high rates of cardiovascular disease observed in HIV positive populations is an important component of this process. Despite this, few data exist documenting the prevalence of smoking among Australians living with HIV infection and what measures their doctors are taking to address this. This study aims to redress this deficiency by surveying consecutive patients attending a hospital-based HIV care clinic regarding their current smoking habits, their degree of interest in quitting and whether or not smoking cessation was discussed during recent medical consultations.

An anonymous, self-report survey is currently being offered to patients attending a hospital-based Infectious Diseases outpatient clinic in Melbourne immediately after a consultation with their doctor. Consenting patients are providing basic demographic information and details of their current smoking habit (whether they smoke, and if so, how many cigarettes they consume in an average day). Smokers are also asked about their readiness to quit smoking and whether the doctors involved in their HIV care have provided smoking cessation encouragement, including discussing aids and strategies for quitting, during recent consultations. The survey is being offered to patients by clinic nursing staff and medical staff have not been informed that the survey is occurring, in order to avoid any survey-driven change in doctor behaviour.

This study is ongoing at the time of abstract submission, with approximately 100 patients having completed the survey and responses from around 200 patients expected to be available by the end of the study period (mid July). The data generated from this survey will provide information on the current prevalence of smoking among adults attending a hospital-based outpatient clinic for HIV care, together with some insight into patient perceptions of how much HIV physicians are doing to encourage smoking cessation. These data can both inform the need for future interventions to encourage HIV positive adults to quit smoking and also provide a baseline measure against which the success of these interventions can be measured.

It is estimated that approximately 2% to 5% of sexually-active Chinese males are men who have sex with men (MSM). MSM in China often have regular female partners and it is not uncommon that HIV will be acquired from high risk unprotected sex with multiple male sex partners and then transmitted to their female partners. This has likely contributed to the rapid growth of the HIV epidemic in China. It is important to estimate the magnitude and trends in HIV incidence among MSM to understand and forecast the trend of the epidemic.

We develop a simple but robust parametric epidemiological model to estimate the HIV incidence among MSM in seven geographical regions of China based on a comprehensive collation of published HIV prevalence data from 1999 to 2009.

Our analysis shows that HIV prevalence among MSM in southwest region increased rapidly from 3.14% in 2005 to 15.1% in 2008. We estimate that the incidence rate in 2009 in China was 2.33/100 person-years in the East, 4.76/100 person-years in the Northeast, 2.85/100 person-years in Beijing, 1.48/100 person-years in the North, 2.79/100 person-years in the South Central region, 3.24/100 person-years in the Northwest and 12.79/100 person-years in the Southwest. In comparison with other Chinese regions, the Southwest region has the highest prevalence and incidence rate, with an annual growth rate of 47%. Due to social stigmatization and the current epidemiology, MSM is one of the groups most at-risk for acquiring HIV in China. In addition, the diagnosis rate for HIV-infected MSM is very low. We estimated that approximately 87% of all HIV cases among MSM remain undiagnosed.

The rapid growth of HIV incidence among MSM has indicated that the epidemic has entered a new stage with homosexual exposure as a major transmission route. Scale-up of HIV testing and public health education interventions specific for MSM are required to curd further spread of HIV.

POSTER NUMBER:
PAPER NUMBER: 758

ARE WE DOING ENOUGH? A SURVEY OF HIV POSITIVE PATIENTS' SMOKING BEHAVIOURS

Carmody, DP, Johnson, K, Bowtell-Harris, C, Airth, L, Cherry, C.

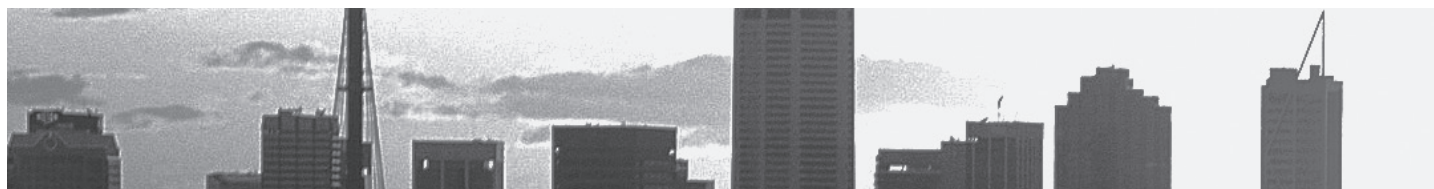
The advances that have taken place

POSTER NUMBER:
PAPER NUMBER: 322

THE COMING ERA OF HIV/AIDS IN CHINA: RAPID TRANSMISSION OF HIV AMONG MEN WHO HAVE SEX WITH MEN

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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 214**

INITIATION OF COUPLES HIV COUNSELING AND TESTING (CHCT) INTERVENTION IN VIETNAM

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Introduction: Vietnam's HIV epidemic is concentrated in injecting drug users, female sex workers, men who have sex with men, and the sex partners of these individuals. HIV counseling and testing (HCT) started in 2002 to promote opportunities for individuals to know their HIV status, reduce risky behaviors, refer sexual partners for testing, increase risk perception, and link into the continuum of care. To date, 250 HCT clinics have been established to provide individualized HCT services in all 63 provinces. Individual HCT data indicate that HIV infection among sexual partners of HIV positive persons and most-at-risk persons are 30% and 15% respectively. Partner disclosure and referral are known to be effective strategies in accelerating HIV prevention and required by the Vietnam HIV/AIDS law; however, challenges in implementation remain.

Methods: The Ho Chi Minh City Provincial AIDS Committee (HCMC PAC) integrated Couples HIV Counseling and Testing (CHCT) services into all 20 HCT clinics in the city in May 2009. The CDC CHCT training manual and protocol were adapted and used to train HCT staff. Routinely collected computerized data from all eight (40%) CDC-supported HCT clinics in HCMC from May 2009 to April 2010 were analyzed.

Results: 271 couples or 542 (4.2%) of 12,842 persons (54% male) seeking HCT services received CHCT services. No same sex couples were reported. All couples accepted and received HIV testing; 99.5% returned together for post-test counseling sessions. 32.3% (175/542) of CHCT clients were HIV positive, compared with 17% positivity among clients receiving individualized HCT ($p < 0.01$). 24.7% (67/271) of couples were HIV discordant, and among them, 51 males and 16 females (ratio 3.2:1) were HIV positive; 21% (54/271) of couples were HIV concordant positive.

Conclusions: Clients presenting for CHCT had a significantly higher HIV prevalence than those who received individualized HCT. The high rate of discordance and positive concordance suggest the need for formal implementation of comprehensive Prevention with Positives programming to reduce secondary transmission. CHCT uptake should be increased through targeted promotion, integration of CHCT messages into HIV-related services, and advocacy for and implementation of CHCT integration into all HCT clinics throughout Vietnam.

**POSTER NUMBER:
PAPER NUMBER: 251**

HIV AND HCV SEROINCIDENCE AMONG FEMALE DRUG USERS IN IRAN

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Iran has the highest per capita opiate consumption in the world. Of the estimated 3.7 million opiate users, 1.1 million are dependent and over 140,000 are injectors. Two thirds of AIDS cases occur among injectors. HIV prevalence among male injectors ranges from 15% to 23% in the community and from 12% to 63% in prison. No information on HIV or HCV seroincidence among female drug users exists.

Methods

The aim was to measure HIV and HCV seroincidence in female drug users in methadone maintenance treatment (MMT) in Iran. From 2007 to 2009, female drug users who attended our methadone clinic were studied at baseline and at follow up. Information on demographics and HIV and HCV related risk behaviours were obtained through either an interview or review of medical files. At both times, women were offered HIV and HCV testing and counselling.

Results

Of the 97 women who attended the clinic, 65 were interviewed and tested at baseline and 40 were followed up six months later. Self reported heroin use decreased significantly from 62.5% before MMT to 12.5% at Follow Up ($p = 0.001$). One in four women reported a history of injecting drugs. Baseline HIV prevalence was 5% and HCV was 24%. No women acquired HIV infection. One woman acquired HCV at follow up; an incidence of 7.1 per 100 person years.

Conclusions

This is the first seroincidence study of HIV and HCV among female drug users in Iran. The high levels of HCV among female drug users, in a country with high levels of drug use, require more women to enter drug treatment if an HIV epidemic is to be avoided.





THEME C: PREVENTING HIV

The HIV Seroconversion Study (SCS) collects both quantitative and qualitative data from people in Australia who have recently seroconverted. We describe the characteristics of gay men in this sample and how the circumstances of the event that led to their seroconversion compare to the circumstances of the most recent occasion of unprotected anal intercourse (UAI) with casual partners among gay men in the PASH (Pleasure and Sexual Health) Study.

187 men who completed an online questionnaire for SCS described a sexual risk event that they believe led to their HIV infection and 617 men in PASH described their most recent occasion of UAI. The mean age of the men in SCS was 37 years and more than half were university educated. When compared to HIV negative men in PASH, both demographically and in terms of their sexual practice, the two samples of men are remarkably similar.

The contexts in which the sexual risk event occurred were broadly similar but differed on these key aspects: in SCS it was more likely to have occurred in the context of group sex (41.7% versus 15.4%), the men in SCS study appear to have been less likely to have been told the HIV status of their partner than the men in PASH (26.2% versus 45.5%), the men in SCS were more likely to engage in UAI with partners they believed to be HIV positive (20.3% versus 6.2% of the HIV negative men in PASH) and the men in SCS were more likely to have been the receptive partner (78.1% versus 37.7%).

The men in SCS appear to be less likely to employ strategies that might minimise their risk of acquiring HIV in the context of UAI than were the men in PASH. Clearer guidelines for non condom-based risk-reduction may help some men to protect themselves and, thereby, their partners from possible HIV infection.

The introduction of highly active antiretroviral therapy (HAART) and further developments in HIV management have resulted in increased survival following HIV infection. In Victoria, the uniformity of benefits on patient survival in different population sub-groups has not been characterised and documented.

The objective of this analysis is to determine survival following HIV diagnosis in Victoria by sub groups. A retrospective analysis of 7414 records in the Victorian HIV passive surveillance system (1982-2009) was undertaken using date of HIV diagnosis to death from any cause as the time-to-event variable. In the Cox model availability of HAART was used as time dependent covariate (pre-HAART 1982-1989; early-HAART 1990-1996; early post-HAART 1997-2002 and late post-HAART 2003-2009), with age at diagnosis, sex and exposure groups (male-to-male sex, heterosexual sex, injecting drug use and other or tissue exposures) as fixed variables.

Of 1,866 deaths notified, 94% were in the pre and early HAART periods. In a backward model selection exposure groups and sex were excluded at $p < 0.05$ level of significance for inclusion. To maintain the proportionality assumption age at diagnosis was categorised into 0-29, 30-39 and 40plus age groups; hence the final model contained HAART periods stratified by age groups.

Compared to the pre-HAART period, the adjusted hazard ratio (aHR) in the early-HAART period was 1.7 (95%CI: 1.3-2.4) 1.4 (95%CI: 1.1-1.9) and 1.9 (95%CI: 1.1-2.5) in the 0-29; 30-39 and 40 plus age groups, respectively. The aHR in the early post-HAART period was 0.3 (95%CI: 0.2-0.4) in the 0-29 year old, 0.3 (95%CI: 0.1-0.4) in the 30-39 year old and 0.4 (0.3-0.6) in the 40 plus age groups. In the late post HAART period aHR was similar for all age groups at 0.1 (95% CI: 0.06 -0.2).

Survival is affected by HAART but there is not evidence in the data that survival is affected by the other factors. This suggests that in regions where poor survival has been reported for some specific risk groups that reduced survival may be a function of access to treatment rather than specific risk behaviours. Further analysis to determine survival until AIDS and impact of delayed diagnosis on survival is warranted.

POSTER NUMBER:
PAPER NUMBER: 544

CURRENT RISK FACTORS FOR HIV SEROCONVERSION AMONG GAY MEN

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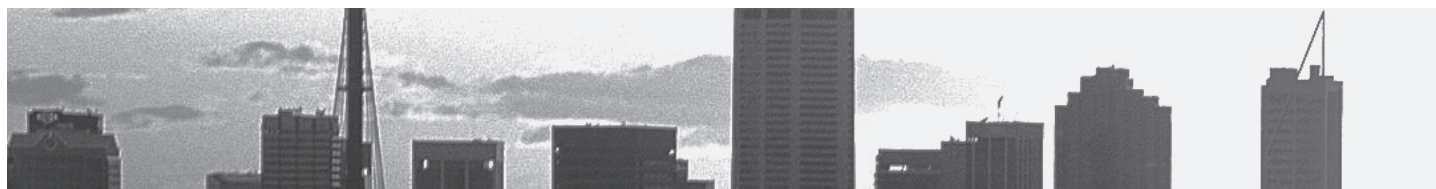
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POSTER NUMBER:
PAPER NUMBER: 702

NEARLY 30 YEARS OF SURVIVAL FOLLOWING HIV DIAGNOSIS: FINDINGS FROM VICTORIA, AUSTRALIA

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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 730**

DOES USING A BED CAPTURE ENZYME IMMUNOASSAY TEST ENHANCE CURRENT HIV SURVEILLANCE PRACTICES?

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The rate of new HIV diagnosis in Victoria has stabilised at post-HAART highs. Identifying incident infections is important for recognising at-risk populations and informing targeted prevention strategies to reduce HIV transmission.

In Victoria incident HIV infections are identified when the individual diagnosed through the enhanced passive surveillance system had a previous negative HIV test and/or a seroconversion illness in the 12 months preceding diagnosis. We investigate whether incidence testing using the BED capture enzyme immunoassay (CEIA) enhances current surveillance data by identifying incident infections not captured through the passive surveillance system and whether additional information is gained on specific subgroups with little or no HIV testing history.

In this analysis, sera from individuals diagnosed with HIV in Victoria in 2009 were tested using the BED CEIA which is a commercial assay developed to identify recent infection (within approximately 155 days). The test results were linked with HIV surveillance records to compare incident infections. To increase the predictive value of the assay, samples from people with a CD4 count of <200 cells per μ L and/or diagnosed with AIDS and those previously diagnosed interstate or overseas were excluded.

Of the 217 specimens tested the BED CEIA identified 94 (44%) recent infections; 69 matched to incident infections in surveillance and 25 were classified as non-incident by surveillance based on the absence of both recent testing history and reporting seroconversion illness. Surveillance identified 95 (45%) incident infections; the assay was unable to identify 26 (27%) of these as recent infections.

When the 25 recent infections identified by the assay were compared with the 95 incident infections classified by surveillance, there was no statistical difference observed in sex, median age, reported exposure, metropolitan residence and place of birth. By combining the BED CEIA and surveillance, 121 (57%) incident infections were identified.

Incidence testing using the BED CEIA identified an extra 25 incident infections not previously identified through passive surveillance. The additional 25 cases increased the proportion of identified incident HIV infections significantly however the result of further investigation of these 25 cases highlighted no new information or subgroup for targeted prevention.

**POSTER NUMBER:
PAPER NUMBER: 296**

MAKING HETEROSEXISM VISIBLE: AN ESSENTIAL FIRST STEP IN HIV PREVENTION

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There are significant barriers to the provision of sensitive services for GLBTI clients, and examples of frank homophobia HIV-phobia exist in health services. These barriers reduce effective screening for HIV and other sexually transmitted infections. Delayed diagnosis contributes to estimate that 31 per cent of new HIV infections are transmitted from the approximately nine per cent of men who have sex with men (MSM) with undiagnosed HIV. Improving access to HIV testing is therefore imperative to reducing new HIV infections.

However, homophobia is simply the visible tip of the exclusion iceberg. Its insidious and invisible base is heterosexism: unseen but possibly even more potent in its impact. By positioning heterosexuality as normal, practitioners make unconscious assumptions that prevent them effectively identifying high risk clients. This coupled with the tendency for medical practitioners to believe their care is neutral and objective denies the impact of power relations and their systemic effects on health. Recognition by practitioners of their own biases is essential to understanding their impact on client encounters and creating genuine equality in health care.

The study presented here demonstrated that GLBTI cultural competency training was able to make visible to participants previously invisible institutional and personal heterosexism. Participants gained concrete insights into the subtle prejudices experienced by their GLBTI clients. Their assumptions of neutrality were also challenged.

This process parallels the 'conscious competence' model of adult learning. In this evaluation participants moved from confidently assuming they and their workplaces dealt with GLBTI clients impartially and well, through conscious incompetence where they became aware of the gaps in their knowledge and their confidence decreased, until some reached a conscious competency and new found confidence which they applied in the workplaces. These practitioners have the interest, the will and the knowledge to become the champions of GLBTI clients in their workplaces and deserve further support in this.

More research is required to measure whether participants' new knowledge benefited their GLBTI clients and to see if this translates into increased HIV and STI screening.





THEME C: PREVENTING HIV

Papua New Guinea is the largest South Pacific nation. It has a land mass of some 460,000 square kilometres, a population of approximately six million people and more than 700 different tribal groups, each with their own traditional culture and language: a third of all known languages in the world. HIV/AIDS is one of the great challenges facing PNG today. HIV prevalence is rapidly increasing, with a generalised epidemic of an estimated 1.7-2% of the population infected with HIV.

The PNG education system caters for a total of 13 million students and employs approximately 45,000 teachers. The education sector is playing a vital role in the HIV response, reaching millions of children and young people all over the country.

Since 2005, AusAID has supported the Department of Education to make an important contribution to the national response. Work of the Education Department has included development of the HIV/AIDS/STI Implementation Plan 2007-2012, inclusion of HIV/AIDS and reproduction sexual health in the national curriculum, development and distribution of HIV-targeted materials to schools and partners and pre-service training.

Efforts to address HIV/AIDS through the formal school curriculum face significant challenges, including: parents and teachers feel uncomfortable talking about sex and sexuality. Some churches continue to insist on abstinence only, and refuse to promote use of condoms as an HIV prevention technique, students may respond with a sense of shame, shyness or fear, cultural practices, traditions and taboos may not allow the subject to be taught in schools, stigma and discrimination, lack of access to vital services, lack of funding and lack of strong and consistent leadership by school authorities.

Prevention of mother-to-child transmission (PMTCT) of HIV during pregnancy and delivery guidelines recommend treatment of HIV-infected pregnant women with an NRTI backbone combined with lopinavir/ritonavir (LPV/r) or efavirenz. Physiological changes occurring in pregnancy mean that standard LPV/r dosing may result in inadequate plasma concentrations of LPV, particularly during the third trimester so it has been suggested the dose should be increased. Thai HIV-infected patients often have higher plasma concentrations after intake of standard doses of ARVs, compared to Caucasian patients. This study investigated whether Thai HIV-infected pregnant women had sufficient LPV/r concentrations in the third trimester with the standard dose (400/100 mg BID).

HIV-infected pregnant women were treated with generic LPV/r 400/100 mg BID and 2 NRTIs. 12h pharmacokinetic curves were recorded at gestational age GA 33 weeks and optionally at 12 weeks post-partum. Blood samples were obtained pre-dosing and at t=1, 2, 3, 4, 6, 8, 10 and 12h post-dosing. Statistical analysis was performed with Stata 11.0. Regression and non-parametric models were used to compare the effect of pregnancy in women with curves at both GA33 and PP12.

Twenty women were included in this study: all completed the GA33 curve and 12 completed the 12PP curve. The median age (IQR) was 28 (25-33) years. Mean (standard deviation (SD)) values for lopinavir AUC_{0-12h}, C_{max}, C_{min} and T_{1/2} were 72.9 (19.2) mg.h/L, 9.3 (2.2) mg/L, 3.2 (1.3) mg/L and 4.8 (2.4) h on GA33 and 98.0 (24.1) mg.h/L, 11.7 (2.2) mg/L, 4.7 (2.2) mg/L and 6.0 (2.7) h on 12PP. In twelve women recording both GA33 and 12PP curves, the mean difference in LPV AUC at GA33 was -24.05 (95%CI -44.38-3.73) mg.h/L and after adjusting for weight, the mean difference was -24.02 (95%CI -46.61 to -1.42) mg.h/L. At delivery, 19/20 (95%) of women had viral load < 50 copies/mL and the other patient had a viral load of 60 copies/mL. Sufficient LPV C_{min} (defined as >1.0 mg/L) was found in 19/20 women at GA33 and all women at 12PP.

The use of standard dose LPV/r (400/100 mg BID) in Thai HIV-1 infected pregnant women leads to reduced, but still adequate plasma concentrations during the third trimester.

POSTER NUMBER:
PAPER NUMBER: 636

THE ROLE OF THE EDUCATION SECTOR IN PNG'S HIV/AIDS RESPONSE

Jeyarathan P, [Kaupa A](#)

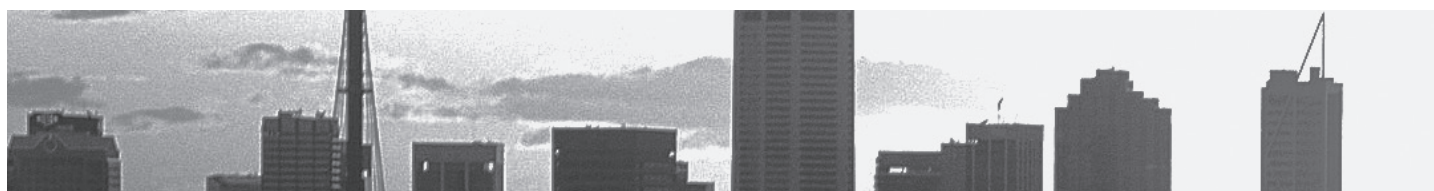
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POSTER NUMBER:
PAPER NUMBER: 742

NO DOSE ADJUSTMENT NECESSARY FOR STANDARD DOSE GENERIC LOPINAVIR/RITONAVIR IN THAI HIV-1 INFECTED WOMEN DURING THE THIRD TRIMESTER OF PREGNANCY

[Kerr, SJ](#)^{1,2}, [Ramautarsing, R](#)^{1,3}, [van der Lugt, J](#)^{1,3}, [Phanuphak, N](#)⁴, [Gorowara, M](#)¹, [Ruxrungtham, K](#)^{1,4,5}, [Chaithongwongwatthana, S](#)⁵, [Burger, D](#)⁶, [Phanuphak, P](#)^{1,3,4}

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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 594**

THE IMPACT OF METHADONE MAINTENANCE PROGRAM ON THE NUMBER OF NEEDLE SYRINGES DISTRIBUTED IN DKI JAKARTA, 2009

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HIV Cooperation Program for
Indonesia

During 2009 there was an increase in the number of methadone maintenance therapy (MMT) services available to IDUs in Jakarta through primary health care (PHC) facilities. The impact of the MMT program on the number of needle syringes (NS) distributed was examined.

In January 2008, 30,248 NS were distributed to IDUs in Jakarta through NGOs and PHCs. However, by April 2009 this number had dropped to 12,094 NS per month - with an average of 18 NS per IDU distributed to 645 individual clients. A substantial increase in reported MMT participants began in late 2008 and had plateaued at 1,200 IDUs by mid 2009.

By mid 2009, 2,277 IDUs had registered for MMT which means that 1,077 clients had completed or dropped out of the program. One doctor at one primary health care centre estimated that 50% of those who had dropped out had returned to injecting. If the return to injecting was as high as 75%, it would account for a loss of another 279 clients to NSP and account for another 4,842 NS that were not required by these former clients.

A survey of participants of both MMT and NSP programs found that 74% of active MMT clients reported no longer injecting. Those on MMT would have collected 16,200 NS which almost entirely accounts for the decrease since January 2008. However, this decrease does not include those clients who had completed treatment with MMT and ceased injecting.

26% of MMT clients surveyed reported still injecting with 60% of those still injecting, doing so every day but at reduced frequency thus probably obtaining only half the usual number of NS/day. This would account for about 2,000 NS. PHC staff reported that these clients are less likely to collect NS from PHC or NGOs supported by the program and use other sources.

Monitoring of NSP can be a useful adjunct to measuring and understanding the impact of other large scale harm reduction programs like MMT. It is likely that a reduction of 20,000 NS distributed per month in Jakarta was due to increased availability of MMT.

**POSTER NUMBER:
PAPER NUMBER: 642**

VISUAL NARRATIVES AS HIV AND AIDS PREVENTION STRATEGY IN THE HIGHLANDS OF PAPUA NEW GUINEA

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This paper presents the early findings from Komuniti Tok Piksa (KTP), a study based in the Highlands of Papua New Guinea (PNG) that explores the effectiveness of visual communication in HIV and AIDS prevention. It presents emerging data around the ways visual methods can amplify community voices about the AIDS epidemic in a culturally appropriate form. PNG has the highest rate of HIV and AIDS in the Pacific region. While current estimations of infections are about 17,000, low test rates and reluctance to disclose status suggest much higher prevalence. The disparate cultures and traditions of PNG, with over 800 language groups, have resulted in significant cultural barriers in the campaign against HIV and AIDS, often restricting unfettered discussion of sex and sexuality.

KTP involves several stages of community engagement and dialogue. Students at the University of Goroka are trained in visual, arts-based and qualitative research methods, and enter local Highland communities. These students work collaboratively with researchers and community members in identifying appropriate community narratives to explore, film, edit, and screen back to communities at facilitated screenings and discussions. The effectiveness of these visual communication resources in HIV and AIDS education and prevention is then assessed, particularly addressing discrimination and stigma.

KTP's use of the visual in the predominantly oral cultures of PNG allows the incorporation of local narratives, provoking an emotional viewer response, stimulating thought and promoting frank discussion of traditionally taboo issues. Visual narratives provide a culturally accepted means for communities to take ownership of the HIV and AIDS prevention strategy. Through facilitating communities themselves to voice their significant knowledge of prevalent issues, the KTP project provides a new space for reversing negative and discriminatory attitudes toward people living with HIV and AIDS.





THEME C: PREVENTING HIV

Currently, the dominant mode of HIV transmission in Indonesia is sharing injecting equipment by injecting drug users (IDUs). The prevalence of HIV among IDUs was more than 50% in Surabaya, Medan and Jakarta in 2007 in Indonesia.

Needle Syringe Programs (NSPs) are an intervention aimed at reducing HIV transmission among IDUs. NSP-based interventions commenced in Indonesia in early 2000 with the aim of reducing sharing rates among IDUs. However, paradoxically although coverage of injecting equipment from NSPs has been increase from 51% to 73% during 2004-2007 in Jakarta, the reported rates of sharing injecting equipment have also increased, from 37% to 63% over the same period. Therefore, we examined the supply-demand relationship for injecting equipment in order to reconcile the apparent inconsistency. We estimate the changes that would like to be required in usage per needle-syringe over time to ensure supply-demand conservation.

We then combined this with biological, epidemiological and demographic data in a model framework to reflect the current epidemiology of HIV in Jakarta.

This approach evaluates the likely impact of NSPs on HIV transmission at the population level in Jakarta. This research also highlights the differences in behavior responses among IDUs due to the introduction of NSPs, reconciles apparent paradoxical data, and conducts impact assessments.

A number of initiatives are now providing education for Victoria's African communities in the areas of HIV transmission, prevention, diagnosis and treatment, in recognition of a previous lack of information for these communities about HIV in Australia. This study sought to understand existing knowledge about HIV within Victorian communities from the Horn of Africa and North Africa, in order to develop more appropriate community education strategies.

A qualitative study was conducted with members of Somali, Ethiopian, Eritrean, Sudanese and Egyptian community-based organizations and providers to these communities of health and social services. Thirty-four in-depth interviews with key informants and eighteen focus group discussions were conducted in English and several community languages. Transcripts were analysed thematically.

Participants from African community-based organizations understood the basic biomedical principles of sexual, blood-borne and mother-to-child HIV transmission, and the pathogenesis of HIV-related illness through immunodeficiency and opportunistic infections. Some lacked detailed knowledge; in particular, the risk of contagion through casual contact with HIV-infected individuals was overestimated and there was little awareness of the effect on prognosis of modern HIV therapy. However they also understood HIV as a social and geopolitical issue, interacting with other issues such as post-colonial relationships between African and industrialised nations, the tension between the Australian government's commitment to humanitarian resettlement programs and the national economic self-interest, and discrimination by national governments against refugees diagnosed with HIV.

HIV education strategies for African communities need to provide accurate biomedical information about HIV prevention and management, but must also consider the broader social context in which such information will be received. Such strategies should include consider community trust in the benevolent intention of government as an objective to be achieved rather than assuming its existence.

POSTER NUMBER:
PAPER NUMBER: 368

THE IMPACT OF NEEDLE-SYRINGE PROGRAMS ON HIV RISK BEHAVIORS AMONG IDUS IN JAKARTA, INDONESIA

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POSTER NUMBER:
PAPER NUMBER: 557

TABULA NEGRA: UNDERSTANDING OF HIV WITHIN VICTORIA'S AFRICAN COMMUNITIES

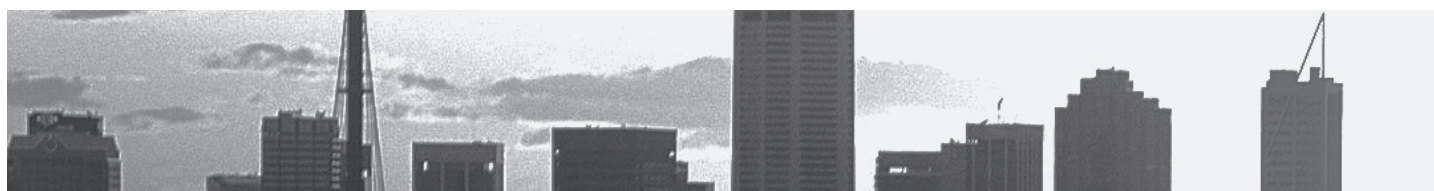
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THEME C: PREVENTING HIV

THEME C

POSTER NUMBER:
PAPER NUMBER: 805

**CREATING DIALOGUE,
ADDRESSING RISK: A
COMMUNITY-BASED PREVENTION
CAMPAIGN TARGETING GAY MEN
WHO INJECT**

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Cooper C

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Research has indicated elevated levels of injecting drug use amongst men who have sex with men (MSM) compared to the general community. It has also been identified that some MSM are injecting in sexual settings. Anecdotal evidence has further underscored knowledge gaps and risk practices amongst MSM regarding blood borne virus transmission.

Gay male injectors in Sydney experience multiple layers of stigma. Many are hesitant to access mainstream drug and alcohol services due to fears of homophobia. Injecting remains highly stigmatised within much of the gay community, despite high rates of incidence, and this limits the scope for candid community discussions about injecting to occur.

ACON determined a need for an education intervention to reducing the risk of HIV and hepatitis C among MSM.

ACON developed, released and evaluated its highly targeted Don't Share a Bloody Thing education campaign in 2009, addressing BBV transmission risks for gay men who inject in sexual contexts.

The campaign was sex positive and addressed the information needs of experienced and new gay male injectors who may be HIV/HCV positive or negative, and gay men who use drugs in sexual contexts. HCV coinfection issues were addressed through a partnership with Hepatitis NSW, Positive Life, NUAA and NCHSR.

Acknowledging that gay men who inject drugs often do not access mainstream drug services, the campaign materials were placed in relevant contexts including community media, Needle Syringe Programs that gay men frequent, websites where gay men find sex partners and particular licensed venues.

The campaign messages and imagery evaluated well, with ACON being seen as a relevant source of injecting information. The evaluation identified:

1. opportunities for using peer networks to extend the reach and relevance of the campaign;
2. there is a clear need to clarify less commonly known facts such as BBV transmission via blood on hands, tourniquets and surfaces, as such risk factors are not clearly understood by MSM who inject;
3. that women who have sex with women and inject drugs have a range of unmet needs and are at increase risk of HIV and HCV transmission.

POSTER NUMBER:
PAPER NUMBER: 788

**USE OF THE BED ASSAY FOR
DESCRIBING TRENDS IN INCIDENT
HIV INFECTION IN SYDNEY, 2005
- 2009**

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Diagnoses of newly acquired HIV infection, with evidence of HIV transmission within 12 months of diagnosis, indicate the lower limit of recent HIV transmission. Specialised assays have been developed to detect incident infection in the specimen with infection, potentially providing a more complete indication of recent transmission.

Cases of HIV infection diagnosed at St Vincent's Hospital, Sydney, were tested with the BED capture enzyme immunoassay (BED-CEIA). Cases with a BED-CEIA result were linked to the National HIV Registry to retrieve the date of first HIV diagnosis in Australia and evidence of newly acquired HIV infection. Sensitivity was estimated among newly diagnosed cases with evidence of HIV acquisition within 365 days of diagnosis. Specificity was estimated among cases with a CD4+ cell count of < 200 cells/μl. Incident HIV infection included newly acquired cases plus BED-CEIA incident cases with a CD4 count > 200 cells/μl without surveillance evidence of newly acquired infection.

Of 969 cases diagnosed at St Vincent's Hospital in 2005 – 2009 with a BED-CEIA result, 533 were newly diagnosed including 227 with newly acquired infection and 436 were previously diagnosed. Sensitivity was 81.3% among newly diagnosed cases of newly acquired infection without AIDS and was 91.2% among those with evidence of infection within 30 days of assay date. Specificity was 87% among 46 cases with a CD4 count of < 200 and without newly acquired infection. Cases with BED-CEIA evidence only (158) resulted in a 54% increase in the number of cases with incident infection. The number of diagnoses of incident infection ranged from 79 in 2006 to 105 in 2007 and 88 in 2009.

BED-CEIA evidence of incident HIV infection complements surveillance for newly acquired infection and indicates substantial ongoing HIV transmission among cases newly diagnosed in Sydney.





THEME C: PREVENTING HIV

Since April 2008, in collaboration with Burnett Institute (BI) in Indonesia, HCPI has supported the Provincial AIDS Commission's care support and treatment working group (CST-WG) to increase access to and improve voluntary counselling and testing (VCT) and care support and treatment (CST) services in Bali. The CST-WG was established in 2005, however its functions were not well understood by its members and stakeholders, nor were VCT & CST services, which were concentrated in Denpasar and Badung, well coordinated.

BI and HCPI focused on supporting the group in defining their roles and functions and designing an effective work plan including a mentoring strategy for VCT/CST services throughout the province. The first six months, resulted in the following improvements:

Roles and functions of the working group were established and understood by members
Planning and implementation of working group activities was well coordinated with members, other provincial working groups and stakeholders
Members of working group became highly committed

Members of working group showed confidence in their own skills and with the mentoring strategy
Since June 2008, CST-WG has been able to build effective VCT & CST services in 5 districts;

Key community stakeholders including religious and traditional community leaders have been successfully motivated to promote VCT and CST in their respective communities

Staff from hospitals, primary health centres and district health offices feel more motivated and appreciate the mentoring support from CST-WG

Four new counselor networks in 9 districts have been established to support access to each district's VCT services

22 midwives and 24 clinical specialists from 9 districts have been trained, resulting in strengthened services and more efficient referral and an increase in people counselled, tested and accessing CST services

Several district hospitals have assigned full-time counselling staff and allocated separate counselling rooms

Five district hospitals have started to provide anti retroviral therapy (ART)

Strengthening of the CST-WG as a coordinating and facilitating team has been an effective strategy for improving and scaling up access to VCT & CST services in Bali. This has been a low-cost initiative and has resulted in improved access to and quality of services.

Altering of genital appearance and size is a practice which has been documented throughout history and across all cultures. These practices continue today with associated increased risks of acquiring and transmitting sexually transmitted infections (STIs) including human immunodeficiency virus (HIV). Many health workers in Papua New Guinea (PNG) have some knowledge of the various products available to alter genital shape and appearance but are unaware of the possible complications and long term side effects they may cause.

The Clinical Outreach, Men's Programs, Advocacy and Sexual Health Services Strengthening project (COMPASS) is part of the Australian Government funded PNG Sexual Health Improvement Program (PASHIP). COMPASS aims to reduce the incidence of HIV in PNG by reducing STI prevalence.

Views and insights shared by participants in four COMPASS STI and Syndromic Management training workshops for health workers in PNG suggested a willingness to address issues relating to men's sexual health and male and female sexual function in STI-based courses. Sexual function and genital alteration by substance use is now included in the COMPASS workshop content, promoting discussion of social and cultural aspects of genital enhancement. The risks of infection including STI and HIV associated with substances used for genital alteration are explored together with ways of reducing these risks.

This presentation will include historical background on genital enhancement and share ideas that may be worth considering when planning sexual health training in PNG.

POSTER NUMBER:
PAPER NUMBER:809

ROLE OF PROVINCE CARE SUPPORT TREATMENT WORKING GROUP AND EXPANSION OF CARE SUPPORT AND TREATMENT SERVICES IN BALI

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POSTER NUMBER:
PAPER NUMBER: 121

GENITAL ALTERATION, HIV AND SEXUALLY TRANSMITTED INFECTION RISK REDUCTION IN PNG

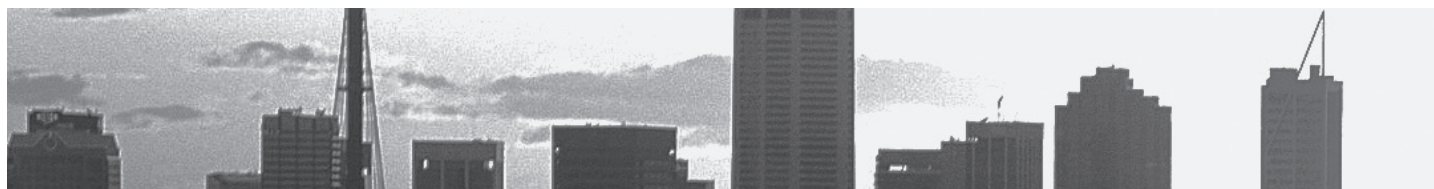
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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 350**

REVIEW OF THE NON- OCCUPATIONAL POST EXPOSURE PROPHYLAXIS (NPEP) MANAGEMENT SYSTEM IN SOUTH AUSTRALIA.

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The South Australian Department of Health implemented a statewide Management System for nPEP in January 2008. Prior to this, informal arrangements were in place with nPEP only being available from Infectious Disease or Sexual Health specialists.

The Management System comprised the following elements:

- State Guidelines and Standard Operating Procedures;
- Statewide medical notification system;
- Provision of starter packs to participating sites;
- Training of key workforces;
- Promotion to key target groups-Men who have sex with Men (MSM); People Living with HIV (PLHIV) and their partners; People Who Inject Drugs (PWID); and
- 24 hour triage hotline.

The SA Department of Health undertook a review of the Management System in early 2010, including analyses of the data received to date. There were 81 notifications received in 2008; 69 in 2009. If year-to-date notifications received in 2010 continue on trend, 78 notifications are expected in 2010. A total of 171 notifications have been received since January 2008. Excluding cases where nPEP was started after sexual assault or occupational exposures, 133 notifications have been received. Of these, the most frequently reported age bracket was 21-30 years. Unprotected Receptive Anal Intercourse was the most frequently cited risk factor (n=54, 40.6%), followed by Unprotected Insertive Anal Intercourse (n=48, 36.1%). Oral intercourse was reported by 11 individuals, comprising 8.3% of all notifications.

Seventeen individuals (13%) self-reported receiving any nPEP more than once. Matching notifications were only available for three of these individuals.

Notification data indicates that nPEP services are being accessed by the target populations (MSM, partners of PLHIV and PWID) following high risk exposures. Both notification and triage hotline data indicates that the service is also being accessed following occupational exposures, community needlestick injuries and sexual exposures not considered to be a significant risk for HIV transmission. There is some service access occurring by individuals from country areas. Five clients accessed nPEP from a location other than the Adelaide metropolitan area, including one from a rural correctional service.

This paper will consider the implications of the findings of the review for the future operation of the nPEP Management System in SA.

**POSTER NUMBER:
PAPER NUMBER:183**

AGEING AND CURRENT ANTIRETROVIRAL LEVELS ARE INSUFFICIENT TO REDUCE THE NUMBER OF PEOPLE LIVING WITH HIV IN AUSTRALIA FOR THE FORESEEABLE FUTURE

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New HIV diagnoses have been increasing in Australia since 1998 while antiretroviral (ART) usage has been decreasing for younger individuals. Numbers and ages of individuals living with HIV in Australia were estimated from National HIV/AIDS Registry data and a previously described mathematical model. The estimated numbers of men who have sex with men (MSM) and not taking ART are significantly correlated with numbers of new HIV diagnoses from 1998, and their average ages over this time are the best predictor of the average ages of new HIV diagnoses (Akaike Information Criterion) compared to average ages for all MSM living with HIV, and for gonorrhea and syphilis notifications. Using this correlation between numbers not taking ART and new HIV diagnoses the mathematical model was used to extrapolate into the future the effect of different levels of ART and ageing of individuals currently living with HIV.

If current ART levels are maintained then the number of MSM living with HIV is estimated to increase at a mean annual rate of 467 individuals (s.d. 64). The majority of this increase is due to a growth in new HIV diagnoses in the under 30 age bracket so that the average age of MSM living with HIV peaks at approximately 45 years of age in 2017, and begins to decrease in age after this time. On the other hand if 80% of MSM in each age group were enrolled on ART after 2010 then numbers of MSM living with HIV would peak in 2015 before decreasing.

Ageing by itself is insufficient to constrain the size of the HIV epidemic in Australia. An increased level of ART usage is required to reduce HIV incidence and the numbers of MSM living with HIV.



THEME C: PREVENTING HIV

Northern Uganda Malaria and Tuberculosis Program (NUMAT), Sexual Gender based violence (SGBV) strategy seeks to facilitate actions to prevent SGBV as it promotes vulnerability to HIV/AIDS the prevalence of HIV/AIDS among women in Northern Uganda is higher than among men (9% and 7.1%- Source, Uganda Demographic Health Survey). Magnitude of GBV: UDHS -Nearly 6/10 women experienced some physical violence since age of 15, over 3/10 women in past 12 months. 650% increase in defilement cases reported from 1997-2006 (MGLSD).

To effectively engage the community, and promote community ownership of the interventions, NUMAT holds dialogue, consultative meetings with local leaders (sub county chiefs, parish chiefs and the police) on how to prevent sexual Gender based violence in their respective communities. To roll out to the community NUMAT has trained 160 community animators to reach out to individual with key sexual Gender Based violence prevention messages. Advocacy campaigns, awareness campaigns on sexual Gender based violence are also carried out with an aim of passing on the messages against sexual Gender Based violence.

Community belief on gender inequality is staunch, without involvement of leaders of various categories (clan, religious and political) addressing SGBV becomes challenging. A systematic approach to behavior change process is very vital. Diversification of approaches is necessary in addressing SGBV (IEC, drama, dialogue, radio). Activities to address SGBV do well when integrated into all components of HIV prevention, care and support interventions. Addressing SGBV may not yield much without building the capacities of existing structures including service providers such as health centers, schools, police, community development and other related government structures

HIV/AIDS programming should exploit sexual Gender based violence interventions in communities in responding to HIV and AIDS, prevention for women and care and support for those living with and affected by HIV and AIDS.

Respondent-driven sampling (RDS) is a relatively new form of chain-referral sampling, especially suited to sampling hard-to-reach populations. RDS has the ability to produce valid population estimates, provided that certain assumptions regarding the sample composition are met. While RDS has been used extensively in many other countries, there have been no published articles describing its use in Australia to-date. This study examines whether an RDS survey of people who inject drugs (PWID) implemented in Sydney can be successful in producing valid population estimates of key socio-demographic and risk indicators.

Five seeds were selected to launch the survey. After providing consent, the seeds completed a questionnaire and were given three study coupons. These coupons allowed entry into the study, and seeds were instructed to give them to other PWID from within their social networks. This process was repeated until the target sample size was reached. The success of RDS was evaluated by: 1) describing the productivity of seeds; 2) assessing the study's ability to meet the assumptions upon which the calculation of valid population estimates rests; 3) determining whether the sample attained equilibrium and 4) summarizing the data on coupon non-accepters to examine non-response bias.

From November 2009 till March 2010, 261 participants were recruited in 16 waves. The sample appeared to meet the RDS assumptions, with the exception of the assumption of random recruitment. The sample reached equilibrium for all indicators examined within one to five waves. Coupon non-accepters were not a major source of non-response bias in this study. However, of note is that 717 coupons were distributed to participants throughout the survey, while only 262 (36.5%) individuals returned with a valid coupon.

While the methods' requirements and assumptions were largely met, an apparent lack of random recruitment and the low proportion of coupons returned were a source of concern. This study shows that RDS can be used successfully in Sydney as a means of recruiting PWID. However, more work is needed to confirm the soundness of the assumptions on which the calculation of valid population estimates are based.

**POSTER NUMBER:
PAPER NUMBER:418**

USING A COMMUNITY APPROACH TO ADDRESS SEXUAL GENDER BASED VIOLENCE IN NORTHERN UGANDA

Opio F

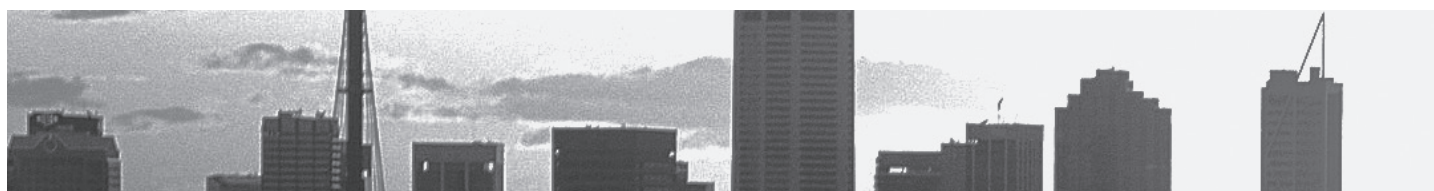
Northern Uganda Malaria and
Tuberculosis Program, Uganda

**POSTER NUMBER:
PAPER NUMBER: 269**

A RESPONDENT-DRIVEN SAMPLING (RDS) SURVEY OF PEOPLE WHO INJECT DRUGS: AN ASSESSMENT OF RDS ASSUMPTIONS AND REQUIREMENTS

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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 499**

SEXUAL RISK BEHAVIOUR AND KNOWLEDGE OF HIV STATUS AMONG A SAMPLE OF GAY MEN IN AUSTRALIA.

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Men who have sex with men (MSM) who are unaware they have a HIV infection (undiagnosed infections) disproportionately contribute to onward transmission of HIV and new infections in Australia. Information about the sexual and health seeking behaviour of these men is important to inform health promotion strategies aimed at increasing HIV testing frequency. This study aimed to assess the extent of undiagnosed HIV infections in MSM and identify characteristics of these men.

In June 2008, we conducted a cross-sectional bio-behavioural study of men attending seven gay-community venues in Melbourne. Participants self-completed behavioural surveys and self-collected oral fluid specimens. Specimens that were repeatedly reactive for anti-HIV antibodies in the screening GACELISA underwent a confirmatory western blot to establish the true HIV status of the individual. We conducted a univariate logistic regression analysis to assess characteristics of undiagnosed men compared to diagnosed and negative men.

We recruited 639 men who agreed to an HIV oral fluid test; of which 61 men returned HIV positive tests, 19 (31.1%) were unaware they were HIV infected (undiagnosed), 42 were aware of their HIV positive status (diagnosed), while 578 men returned HIV negative tests. Compared to HIV negative men, men with undiagnosed HIV were more likely to report their last HIV test >12 months ago (16.4%vs31.6% respectively, OR 2.6, 95%CI 0.9–7.9); unprotected anal intercourse with casual partners (14.5 %vs21.0%, OR 1.6, 95%CI 0.5–4.9) and being unsure of their HIV status (11.6%vs36.8%, OR 4.4, 95%CI 1.7–11.7). Compared to diagnosed HIV positive men, men with undiagnosed HIV were more likely to report their last HIV test >12 months ago (26.5%vs31.6% respectively, p-value 0.2), aged under 40 years (20.0%vs61.1%, p-value <0.01) but less likely to report unprotected anal intercourse with casual partners (43.6%vs21.0%, p-value 0.10).

Overall both undiagnosed and diagnosed HIV positive men reported greater sexual risk than HIV negative men. The findings highlight the urgent need for health promotion and clinical strategies to increase HIV testing frequency among gay men, particularly those highly sexually active. Timely HIV diagnosis will allow gay men to appropriately modify their sexual risk practices and reduce transmission risks.

**POSTER NUMBER:
PAPER NUMBER: 682**

HIV PEER SUPPORT IN THE QUIT FRESH START COURSE PROVIDES A POSITIVE INFLUENCE IN ASSISTING SMOKING CESSATION.

Perri V

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More and more evidence is pointing to smoking as an increasingly important factor in the health management of people living with HIV. While there are many smoking cessation methods available The QUIT FRESH START course provided by People Living With HIV AIDS Victoria in partnership with QUIT Victoria, provides a safe and confidential environment where peers living with HIV can support each other in their efforts to cease or at least reduce their smoking. Evaluations have shown that the majority of course participants have either quit or greatly reduced their daily number of cigarettes and have given feedback that this is due to the components of the course curriculum as well as the peer support from the other participants in the group.





THEME C: PREVENTING HIV

Cambodia surveillance data suggest that HIV prevalence has been declining in female sex workers. However, there is no data on the HIV prevalence among drug user, who is also considered as a high-risk group in Cambodia. Consequently, a survey was conducted in 2007 to estimate the HIV prevalence and to assess risk behaviors among this group.

Drug user in rehabilitation centers and communities were recruited. Respondent driven sampling (RDS) was used to recruit DU in communities, while probability proportionate to size (PPS) was used to recruit DU from rehabilitation centers. In addition to structured questionnaire, blood specimen was collected and prepared on Dried Blood Spot (DBS).

Among 170 IDU recruited in the survey, 35% among IDU reported ever sharing needles and syringes last time injected drug and 26% of them reported having injected drugs which had been dissolved in someone else's blood in the past month. About 79% of IDU and 83% of non IDU claimed that drugs increase their libido. The percentage of condom with regular partner among IDU and non-IDU was 40% and 53%, respectively. About 64% of both IDU and non-IDU reported having sex with brothel based or street based female sex workers with the consistent condom use about 70%. The HIV prevalence among IDU was alarmingly high at 24.4% compared to 1.1 among non-IDU..

Both IDU and non IDU are at great risk of getting infected with HIV through their injection practice or their high risk sex. Drug user also plays a role in spreading the HIV infection to other people such as their paid and unpaid sexual partners. Thus, intervention should be considered to contain the HIV epidemic among DU and prevent HIV from spreading out to other groups.

Introduction Non-occupational post exposure prophylaxis (NPEP) is now widely prescribed after potential sexual or injecting drug use exposures to HIV. The Victorian NPEP Service recommends that all patients who present for NPEP have an HIV test at baseline and a final follow up HIV test at 12 weeks post exposure. As efficacy is not expected to be 100%, the 12 week test is critical to identify potential NPEP failures, however the number returning for this test is consistently low.

Methods We searched the Victorian NPEP Service database for all entries with a positive HIV antibody result. Histories of those who seroconverted after NPEP were reviewed to describe the circumstances of their HIV seroconversion and determine whether they represent NPEP failure or not.

Results Twenty-five patients were found to be HIV positive at presentation for NPEP (1.1% of all patients presenting for NPEP and 0.9% of all NPEP presentations). For 18 patients, this was the first ever presentation for NPEP. The other 7 had received NPEP before; 2 completed follow up with a negative HIV test more than 3 months after NPEP, and the other 3 had no documented follow up. There were 11 seroconversions identified during follow up post NPEP. Of these, 6/11 seroconverters initially reported no other exposure risks following NPEP commencement; however 2/6 later disclosed subsequent episodes of unprotected anal intercourse hence there were likely four NPEP failures. A further 3/11 seroconverters were unlikely to have experienced NPEP failure as other recent risk exposures were documented at the time of receipt of NPEP. Finally 2/11 patients were positive at baseline and had previous presentations for NPEP 5 months earlier. However as these patients did not have a follow up HIV test after the earlier presentation it is not possible to determine if these represent NPEP failures or not.

Conclusion Although NPEP is not 100% effective it is important to report potential "NPEP failures" as part of HIV prevention programs and to emphasise the need for follow-up testing post NPEP. These finding also emphasise the importance of baseline HIV testing for all patients who present for NPEP.

POSTER NUMBER:
PAPER NUMBER:190

HIV PREVALENCE AND RISK BEHAVIORS AMONG DRUG USER IN CAMBODIA 2007.

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POSTER NUMBER:
PAPER NUMBER:367

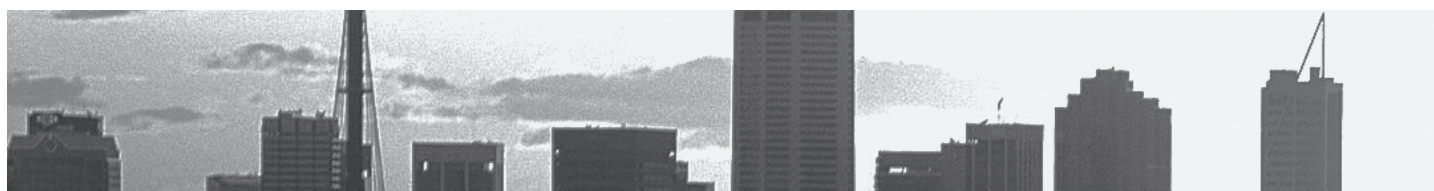
NPEP PATIENTS TESTING POSITIVE FOR HIV AT BASELINE VISIT AND DURING FOLLOW-UP PERIOD

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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 218**

RESULTS OF AN HIV PREVENTION OUTREACH PROGRAM FOR DORMITORY STUDENTS IN A NORTHERN THAI PROVINCE, 2005-2009

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Prior surveys reported that youth in Northern Thailand are at high risk of HIV and that HIV risk behaviors were associated with living in a dormitory. In response, a dormitory outreach program in Chiang Rai, a northern province, was piloted by the Ministry of Health, in collaboration with the US CDC.

Participants in the dormitory were provided with three HIV-prevention sessions. Each session was approximately one month apart. Participants were asked to complete a baseline survey on HIV-related knowledge, attitudes and behaviors, and a follow-up survey 6 months later using computer-assisted self-administered interviews. We analyzed changes in risk behavior among sexually active participants using McNemar chi-square. Multivariate and linear chi-square analyses were used to assess factors associated with changes in behavior, and the association between behavior changes, at the $p < 0.05$ significance level.

Of the 265 participants who completed both surveys, 75 (18%) reported ever having sex. Sexually-active participants were similar to sexually-naïve participants in baseline age, sex, HIV knowledge, and intention to get an HIV test. Sexually-active participants were significantly more likely to be in college, access online pornography or reproductive health (RH) resources, and use alcohol. At baseline, the median age among sexually-active participants was 19, 57% were men, 80% were college students and 72% scored above the mean on HIV knowledge tests. Sixty-one percent had one training session and 21% completed all three sessions. Self-reported condom use and access to online RH resources increased significantly from baseline to follow-up (44% to 69%; and 29% to 43%, respectively). Factors associated with increased condom use were, at follow-up: access to online RH resources, experience in buying condoms, having a current boyfriend/girlfriend, permissive attitude towards sex, and confidence in ability to negotiate condom use. Number of outreach sessions and change in use of online RH resources were not associated with a change in condom use.

Condom use and access to online RH resources among sexually-active youth increased significantly at 6-month follow-up. A number of factors contributed to increases in condom use, suggesting that a multifaceted approach may be more effective than a single intervention.

**POSTER NUMBER:
PAPER NUMBER: 443**

REASONING RISK-REDUCTION

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Perceptions of HIV and risk behavior

have changed among gay men. We investigated current beliefs about risk and HIV among Australian gay men.

Methods: Pleasure and Sexual Health was an online survey of 2306 Australian gay men recruited during mid-2009. The majority of men (54.9%) no longer saw HIV as a death sentence. 40.8% of men who reported unprotected anal intercourse with casual partners (UAI-C) in the previous six months and 27.8% of men who reported no UAI-C believed that HIV was a controllable disease ($p < 0.001$). Also, while only 13.4% of men who always used condoms told us that there are some things they do now which they previously thought were too risky, this was true for 30.2% of men who reported recent UAI-C ($p < 0.001$). Whereas 59.9% of HIV-negative men said they might consider insertive UAI-C with someone who had told him he was also HIV-negative, only 43.6% would do so in the receptive position. If they did not know their partners' HIV status then only 30.6% would consider insertive UAI-C and 20.1% would consider receptive UAI-C. Very few would consider UAI-C with a partner they knew to be HIV-positive, even if they believed his viral load was undetectable, whether they were the insertive (7.5%) or receptive (3.4%) partner.

Like everyone, gay men are willing to take some degree of risk in the pursuit of pleasure, but the perception of risk is no longer as severe as it once was. However, these considerations are contextual and often are related to how well they knew their partners. Gay men who take some risks often do so with an increased sense that it is possible to live with HIV if they are able to access effective treatments. Considerations about what is 'safe' are no longer simply equivalent to condom use, and gay men's decisions about what they consider 'safe sex' may often depend on a specific partner, in a specific place, at a specific time, and may often be more about the potential pleasure of the sex than about any perceived risk.





THEME C: PREVENTING HIV

Introduction: Currently there is no clear data reflecting the utilisation of Voluntary Counselling and Testing (VCT) services by young adults in Limpopo Province. The hospitals are offering VCT services in the province, and if these services were properly utilised, it was going to be evidenced by the reduction of HIV and AIDS statistics. However, several factors such as accessibility and socio-cultural issues may impact on the use or uptake of VCT. It is therefore important to document the perceptions of young adults and of VCT counsellors towards VCT use by young adults. The purpose of the study was to develop an educational programme to improve perceptions of young adults regarding VCT use in Vhembe District Limpopo Province.

Methods: The study was conducted in Vhembe district, Limpopo Province. The research approach was conducted in three phases. Phase one included research design and methods (population, sampling, data collection, data analysis, ethical measures and trustworthiness of data. Phase two addressed development of an educational programme based on the findings from situational analysis. Phase three included programme implementation.

Results: Three themes emerged from the findings of VCT counsellors with categories and subcategories.

VCT counsellors expressed different perceptions regarding the use of VCT Programme by young adults

Difficulties associated with VCT counsellors as providers of service to young adults which has negative impact on VCT services rendered Strategies that can be used to promote VCT uptake by young adults

The use of the findings will contribute to the reduction of HIV and AIDS by promoting VCT uptake by young adults.

POSTER NUMBER:
PAPER NUMBER: 36

PERCEPTIONS OF VCT COUNSELLORS WITH REGARDS TO VCT USE BY YOUNG ADULTS BY IN VHEMBE DISTRICT, LIMPOPO PROVINCE IN SOUTH AFRICA.

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THEME C

The global HIV-1 epidemic is driven by many different subtypes. Tracking of these subtypes is imperative as it provides information regarding transmission patterns and epidemic change. Furthermore, the distribution of subtypes in different geographical locations may be important for vaccine design. Subtype B is the predominant subtype in the USA, Europe, and Australia while in India, Southern Africa, and parts of Brazil subtype C dominates the epidemic. The first discovered recombinant, CRF01_AE is responsible for the majority of infections in China, Indonesia and South East Asian countries. Meanwhile, in Africa, all nine (A-D, F-H, and J, K) subtypes, including recombinant viruses, are present in differing prevalence.

Molecular data on the HIV-1 epidemic in PNG is limited to a single published report from 2007 that indicated a subtype C epidemic. The published data constituted the first batch of samples from the 2002-2005 nationwide HIV and STI mapping study in PNG. This current work aimed to characterize the remaining half of the mapping study samples.

Specifically, the aims of the study were to determine the pattern and distribution of HIV-1 subtypes in PNG. Furthermore, the study aimed to investigate if there are sub-epidemics occurring among different geographical areas.

RNA was extracted from all HIV antibody positive sera and double-nested Polymerase Chain Reaction (PCR) was performed to amplify a 350bp section of the HIV-1 env gene. The purified PCR products were sent to Australian Genome Research Facility for sequencing. Subtype was assigned by phylogenetically analyzing the PNG sequences with defined reference sequences. To further characterize the epidemic in PNG, analyses with the previously published PNG sequences and sequences from other epidemics were conducted.

Nineteen HIV-1 infected blood were successfully subtyped and consistent with the previous report two different subtypes were identified, C (94.7%, n=18) and B (5.3%, n=1).

To date, the 54 sequences characterized from PNG represent eight different mainland provinces. Subtype C dominates in all areas, with the notable exception of Sandaun province where the only sequence characterized was subtype B. The subtype C viruses represent a monophyletic cluster, and are distinct from any other characterized subtype C epidemic in the world.

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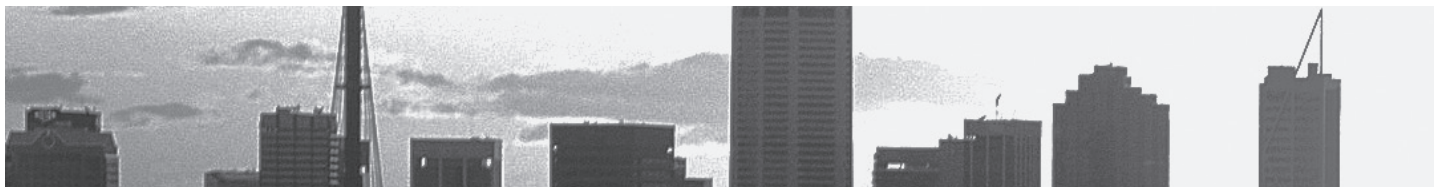
*RO is a staff member of the International Bank for Reconstruction and Development/The World Bank. The statements, findings, interpretations, and conclusions presented in this article do not necessarily reflect the views of the Executive Directors of the World Bank or the governments they represent.

POSTER NUMBER:
PAPER NUMBER: 357

MOLECULAR ANALYSIS OF HIV-1 SUBTYPE C IN PAPUA NEW GUINEA

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THEME C: PREVENTING HIV

THEME C

POSTER NUMBER:
PAPER NUMBER: 495

TRENDS IN HIV PREVALENCE AMONG HOMOSEXUAL MEN IN NEW ZEALAND 1985-2009

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Introduction

Annual population-based estimates of the number of men who have sex with men (MSM) living with diagnosed HIV infection (HIV prevalence pool), and the proportion of all MSM this represents (HIV prevalence), have been insufficiently described over the long term. We investigated the dynamic effects of ongoing HIV diagnoses, lower mortality due to antiretroviral therapy, and growth in the MSM population over 25 years on these two epidemic indicators.

Methods

National routine HIV/AIDS surveillance data in New Zealand were examined from 1985-2009. These included HIV diagnoses through Western blot antibody testing, cases identified through viral load testing, AIDS diagnoses, and information on losses of diagnosed individuals where the mode of transmission was MSM. Annual HIV prevalence among MSM was derived by applying various estimates of the annual MSM population to the HIV prevalence pool.

Results

Surveillance data suggest that 1,313 MSM were living with diagnosed HIV in New Zealand as at the end of 2009, under the assumption that all MSM diagnosed with HIV and not known to have died or gone overseas were still living in this country. The diagnosed HIV prevalence pool rose 79% between 1989 and 1999, and 137% between 1999 and 2009 when antiretroviral therapy had reduced mortality and new HIV diagnoses among MSM were rising.

Population-based estimates of diagnosed HIV prevalence as a proportion of MSM were strongly dependent on the assumptions made about the denominator MSM population. These began at 0.2% of MSM in 1985 and were between 1.5% and 5.0% of MSM by 2009. HIV prevalence increased over time, unless the MSM population grew at a faster rate than the male population aged 15-59. In this case, HIV prevalence stabilised, or even declined during some years.

Conclusion

New Zealand still has a low prevalence HIV epidemic among MSM. Nevertheless, 25 years after HIV testing was introduced the number of MSM living with diagnosed infection is growing rapidly. Strengthened prevention responses are needed, and the health needs of an expanding population of HIV positive MSM planned for.





THEME C: PREVENTING HIV

Till recently, there was comparatively limited data on the STI/HIV/AIDS situation within the states in India. But from National AIDS Control Programme 3 (NACP-3) of NACO, with a massive scale up of STI/HIV/AIDS prevention programmes, better services, improved Monitoring and Evaluation (M&E) and a strong Management Information System (MIS), there is now a wealth of data available within the State AIDS Control Societies (SACS).

With this background NACO commissioned an epidemiological profiling of HIV/AIDS situation at district and sub-district level using data triangulation (DT). This was piloted in 7 states and is now being scaled up. Various agencies were involved in conducting this exercise with support from respective SACS. In the state of Andhra Pradesh (AP), IIPH-Hyderabad was involved as the state lead agency for conducting this exercise.

Objectives of this exercise was to:

Prepare a district and sub-district level profile of HIV epidemic

Build capacity of M&E teams at state, district and sub-district levels on DT processes and translate outputs into relevant knowledge products

Prepare a district-level action plan based on an analysis of gaps in response and information

Methods: STI/HIV/AIDS data available from all possible sources (such as HIV Sentinel Surveillance data, Anti Retroviral Therapy data, Targeted Interventions data, Voluntary Counseling and Testing Centre data) were triangulated to arrive at more realistic figures of levels, trends, differentials and drivers of STI/HIV/AIDS epidemic.

Results: This paper documents the actual process of DT that was undertaken and describe key findings for AP.

For the first time in India, actual district and sub-district level information on HIV/AIDS is available as a result of DT exercise. Prior to DT, districts within the state were categorized into High/Medium/Low prevalence districts based on HSS data; with this study, an evidence based re-categorization of districts is considered. This study has far reaching implications on determining actual program gaps in terms of service availability, coverage and response. It helps in program planning in terms of prioritization of high risk groups and geographic areas, reallocation of resources (money, manpower, service provision), setting up of new facilities, strengthening and scaling up of the programme.

HIV Hypochondriasis, as an AIDS phobia, is generally considered as a mental illness based on fear and ignorance about HIV infection. In mainland China, a group of people formed a virtual group on the Internet through blog and QQ Group, convinced that they were "Latent Infective Patients". This group believed that their virus was invisible but more formidable than ordinary HIV, because it could be spread by means of physical contact and saliva. Through the pressure of their public activities, the group successfully lobbied the China CDC and hospitals to examine and treat them. This event not only changed the traditional power relationship between doctor/government and patient, but also created a new challenge for HIV/AIDS prevention.

POSTER NUMBER:

PAPER NUMBER: 265

CREATING A STRONGER EVIDENCE BASE FOR PROGRAM PLANNING AND IMPLEMENTATION: HIV/AIDS DATA TRIANGULATION IN ANDHRA PRADESH, INDIA.

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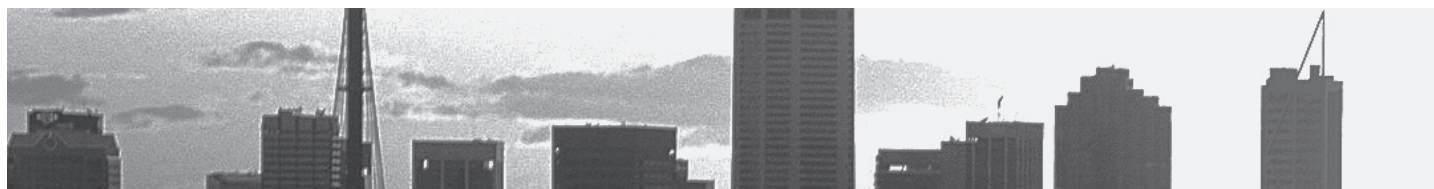
POSTER NUMBER:

PAPER NUMBER: 428

RESEARCH ON THE DOCTOR-PATIENT ROLE IN CASES OF HIV HYPOCHONDRIASIS

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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 754**

USING THE MOBILE HEALTH AND NUTRITION PROMOTION EVENT TO SCREEN BEHAVIORAL RISKS FOR SEXUALLY TRANSMITTED INFECTIONS AND HIV IN THE RURAL COMMUNITIES OF CHAMPASAK PROVINCE, LAO PDR

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Delayed diagnosis of sexually transmitted infections (STI) and Human Immunodeficiency Virus (HIV) infection is common in rural areas of Lao PDR due to stigma. Early diagnosis of STI/ HIV infection results in timely treatment and prevention of transmission to others. The Mobile Health and Nutrition Promotion event was implemented to screen people for STI/ HIV risks in two rural communities of Champasak Province, Lao PDR.

The event was implemented in 1 weekday in 2 villages. Advertisement of the event occurred prior via a community speaker. The activity included general health check up, nutrition assessment and counseling, group education and risk screening for STI/HIV infection. A questionnaire was used to interview and collect demographic data, STI symptom, HIV risk factors, nutritional status, and willingness to access STI/ HIV testing at the clinic.

310 people participated in the events and 229 (women=197, men=32) were 15-45 year olds, further demographic data will be presented. Mean (\pm SD) body mass index (BMI) was 21.5(\pm 3.3) kg/m². Prevalence of underweight (BMI <18.5) was 36(15.7%). Current STI symptoms were reported among 67 (34.0%) of women and 7 (21.9%) of men ($p=0.173$). Most STI symptom were abnormal vaginal discharge ($n=42$, 18.3%) and lower abdominal pain ($n=37$, 16.2%). HIV risk behaviors were identified 131 people (57.2%) and was significantly higher in males than females ($p=0.030$). Among those with identified HIV risk factors, 55 (24%) had a current STI symptom. Most of HIV risk factors in this population were unprotected sex intercourse (48.9%, $n=112$). All of those with identified risks for HIV infection and/or having current STI symptom/s were advised to access further testing at the clinic, only 12 people (8.1%) of which were female showed willingness to attend the clinic. The remainder felt confident in their partners and thought they would not get infection. However, one month later, none presented at the clinic.

The baseline results show that further activities are warranted. The model will be revised in order to reach more males and higher risk people and to enhance testing among those with identified risks for STI/ HIV infection.

**POSTER NUMBER:
PAPER NUMBER: 393**

PROFILE OF LYMPHOCYTE -T CD4 COUNT IN STAGE I OF HIV & AIDS PATIENTS

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Infection disease in HIV/AIDS makes

the decrease of T cell lymphocyte CD4 count, because it attacks the immune system of human body. Determination of T cell lymphocyte CD4 count is important to determine the progress of HIV infection. In infection of HIV stage I, there are no present of symptom and only generalize persistent of limfadenopathy and there are some information of T cell lymphocyte CD4 count is it still in normal range. The determination of T cell lymphocyte CD4 count is important to decide the intervention that used.

This research is aimed to know the profile of T cell lymphocyte CD4 count in stage I of HIV infection.

This research used cross-sectional descriptive method, which data are from patient's record in January 2008 until June 2009 in HIV Unit, Dr. Soetomo Hospital

Based on 55 samples that are included in inclusions criteria, there are 10 patients (18,18 %) whose the T cell lymphocyte CD4 count are in normal range which is more than 600 cell/mm³. Then the count of T cell lymphocyte CD4 cell between 350 cell/mm³ until 600 cell/mm³ is appear in 20 patients (36, 36%), and between 200 cell/mm³ until 350 cell/mm³ are 15 patients (27, 27%) and less than 200 cell/mm³ are 10 persons (18, 18%).

It can conclude that the count of T cell lymphocyte CD4 in stage I of HIV infection is already decreasing and there are many variety in T cell lymphocyte CD4 count. So that it is suggested to determine the right intervention to prevent the severe infection.





THEME C: PREVENTING HIV

Tuberculosis (TB) is one of the most frequent opportunistic infection in HIV&AIDS patients. There is a strong relation between TB and HIV infection. HIV infection increases the incidence of tuberculosis, in other hand, TB infection can worsen the HIV infection. This research was conducted to found the case of TB in HIV patients at UPIPI RSUD Dr. Soetomo Surabaya.

This research used descriptive type and qualitative approach. The population of this research is all the secondary data of HIV&AIDS that taken care by UPIPI from January to December 2008. Data and research variables are TB classification and patient's profile (age, sex, HIV risk factor, CD4 T cell Lymphocyte count and BTA test result).

The HIV&AIDS patient mostly infected by pulmonary TB, common in 25-44 group of age, male, got the HIV by sexual intercourse, had the CD4 T cell Lymphocyte count <200 cell/ μ L, and have a positive acid fast bacteria in their sputum.

POSTER NUMBER:
PAPER NUMBER: 394

PREVALENCE OF TUBERCULOSIS IN HIV & AIDS INFECTION

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THEME C

Acquired immune deficiency syndrome or acquired immunodeficiency syndrome (AIDS) is a disease of the human immune system caused by the human immunodeficiency virus (HIV). This condition progressively reduces the effectiveness of the immune system and leaves individuals susceptible to opportunistic infections and tumors.

Descriptive cross sectional study in the pattern of opportunistic infections in patient with HIV-AIDS based on his lymphocyte T CD4 count at Dr. Soetomo Hospital Surabaya January – Desember 2008. There are 190 patients which are suitable with inclusion criteria. Prevalens of tuberculosis infection on HIV-AIDS patients with bad immunity status is 24,74 % higher than good immunity (0,53 %) and medium (1,58 %); Prevalens of candidiasis infection on HIV-AIDS patients with bad immunity status is 51,05 % higher than good immunity (2,11 %) and medium (4,21 %); Prevalens of PCP infection on HIV-AIDS patients with bad immunity status is 8,24 % higher than good immunity (0,5 %) and medium (0,5 %); Prevalens of toxoplasmosis infection on HIV-AIDS patients with bad immunity status is 2,63 % higher than good immunity (0 %) and medium (0 %); Prevalens of CMV infection on HIV-AIDS patients with bad immunity status is 2,11 % higher than good immunity (0 %) and medium (0 %); and prevalens of diarrhea on HIV-AIDS patients with bad immunity status is 25,27 % higher than good immunity (0,5 %) and medium (1,1 %).

From the research we know that pattern of opportunistic infection on HIV-AIDS patients is depend on immunity state. More bad immunity state of the patient, more kind of the opportunistic infections will be suffered.

POSTER NUMBER:
PAPER NUMBER: 392

PROFILE OF OPPORTUNISTIC INFECTION IN HIV & AIDS PATIENTS

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We do not know what is driving the HIV epidemic in Fiji. HIV and AIDS is a multifaceted, complicated and convoluted issue that will continue to be a challenge in Fiji in the next decades. The first HIV positive case in Fiji was confirmed in 1989 and since then till 31st December 2009, the cumulative number of confirmed HIV Positive people in Fiji is 333. We know little about the characteristics of HIV positive cases in Fiji and what is really driving the HIV epidemic in Fiji. Because of limited HIV data and statistics in Fiji, we assume much of the details of the epidemic such as route of transmission through observed and perceived behaviors of high risk groups and vulnerable people

The Research Questions are: What is driving the HIV epidemic in Fiji; what are the characteristics of HIV positive people in Fiji; and what sexual behaviors were practiced at the time of HIV infection. This thesis is based on the conceptual hypothesis that there are particular sexual behaviors, common personal and social characteristics & social determinants of sexual behavior that are exposing the Fijian population to the risk of HIV infection. This thesis will attempt to close the gap in knowledge of the drivers of the epidemic by examining further PLWHA medical records to determine various behavioral variables. The Declarative Hypothesis is that those who are HIV-positive would have multiple sexual partners and little or no condom use at the time of sero-conversion in the Fijian population is driving the HIV epidemic in Fiji. The Null Hypothesis is that there is no relationship between multiple sexual partnering and lack or no condom use in the Fijian population and the HIV epidemic in Fiji.

This dissertation will provide additional insights and perspectives to further strengthen the framework and multisectorial national response to HIV in Fiji.

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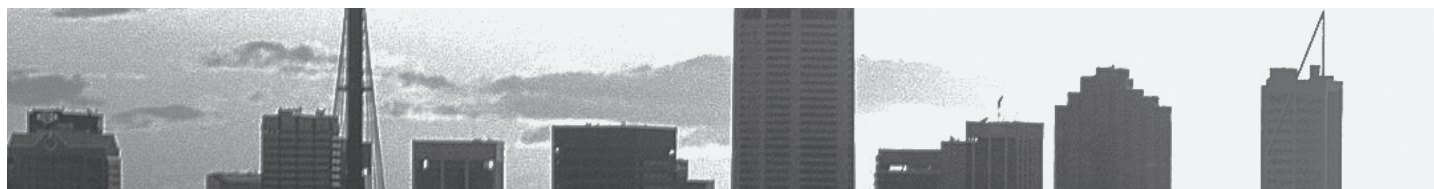
DISSERTATION ON THE RESEARCH: WHAT IS DRIVING THE HIV EPIDEMIC IN FIJI

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THEME C: PREVENTING HIV

THEME C

POSTER NUMBER:
PAPER NUMBER: 483

A TYPOLOGY OF PENILE CUTTING IN PAPUA NEW GUINEA: RESULTS OF A MODIFIED DELPHI STUDY AMONG SEXUAL HEALTH CLINICIANS

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Browne K3, Sauk J4, Kelly A5,6, Kupul
M5, Aeno H5, Siba P5, Kaldor J7,
Valley A1,7 on behalf of the Male
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Male circumcision (MC) has been shown to prevent HIV acquisition in men in large-scale clinical trials in Africa but the acceptability of this intervention, the socio-cultural context into which it would be introduced, and its potential epidemiological impact remain unclear in other settings. Penile cutting, penile inserts and other penile practices are thought to be common in Papua New Guinea (PNG) due to a complex interplay between traditional and contemporary influences, practices and beliefs. A systematic clinical typology of penile cuts has not however previously been documented.

A modified Delphi study was conducted among sexual health clinicians in PNG to document and classify variants of penile cutting. A panel of seven experts was created, composed of three medical practitioners with an interest in sexual health, two university researchers and two sexual health program managers. All participants had clinical or research experience in sexual health and penile cutting practices in PNG.

A clinically-defined typology of penile cutting was developed. Three broad categories of penile cutting were defined: circumferential cuts, longitudinal cuts and incisions that did not alter the penile or foreskin profile. Complete and incomplete dorsal longitudinal slit were noted to be particularly common in PNG. Penile cutting was described as occurring within both the formal health system and within communities and non-medical systems.

A succinct clinical typology of penile cutting was defined, providing a shared reference for health practitioners and policy makers in PNG. The popularity of the dorsal slit has important implications for policy makers considering MC as an intervention for HIV prevention in PNG. Its procedural simplicity and limited resource requirements suggest that in principal it could be an attractive option for a future intervention program but its potential protective effect against HIV and STI acquisition, compared to conventional MC, remain unclear. Further research is required to investigate the potential role of dorsal longitudinal slit for HIV/STI prevention in this setting.





THEME C: PREVENTING HIV

The acceptability of female-controlled biomedical prevention technologies such as female condoms or vaginal microbicides have not previously been investigated in Papua New Guinea (PNG). Factors likely to impact on the future uptake and effectiveness of such interventions such as women's ability to negotiate safer sexual choices, remain unclear.

A multi-method qualitative study was undertaken among men and women attending Nine-Mile Sexual Health Clinic, Port Moresby. Participants for in-depth interviews (IDIs) were identified through preliminary focus group discussions (FGDs) with clinic attendees and/or invited to take part by clinic staff on the basis of their unique insights and lived experiences. Interviewers pre-filled commercially available vaginal applicators with approximately 2-3mL KY Jelly® to create a 'dummy' vaginal microbicide gel and applicator, which was then demonstrated to participants.

A total of 16 IDIs were conducted with women and 12 IDIs with men. The majority of both women and men said that they would use a product like the dummy gel and applicator to provide protection against genital infections, STIs and HIV, should a safe and effective preparation become available in future. Microbicide use was considered most appropriate in perceived 'high-risk' situations, such as sex with non-regular, transactional or commercial partners. Most women felt confident that they would be able to negotiate future vaginal microbicide use with their sexual partners but that if necessary would be prepared to use product covertly. Some women expressed concerns that applicators might be difficult to use without initial counselling and support from health care staff; that incorrect use could result in vaginal trauma; and that gel might cause excessive vaginal lubrication or leak out on changes in posture.

Notional acceptability of vaginal microbicides for HIV/STI prevention was high among women and men attending a sexual health clinic in Port Moresby, PNG. Further research is warranted to investigate the acceptability of a variety of different delivery methods and preparations (e.g. intra-vaginal ring, dispersible vaginal tablet) in this context if there is a move to large-scale vaginal microbicide safety and acceptability trials.

POSTER NUMBER:
PAPER NUMBER: 477

VAGINAL MICROBICIDE ACCEPTABILITY IN PAPUA NEW GUINEA: RESULTS OF A QUALITATIVE STUDY AMONG WOMEN AND MEN ATTENDING A SEXUAL HEALTH CLINIC IN PORT MORESBY

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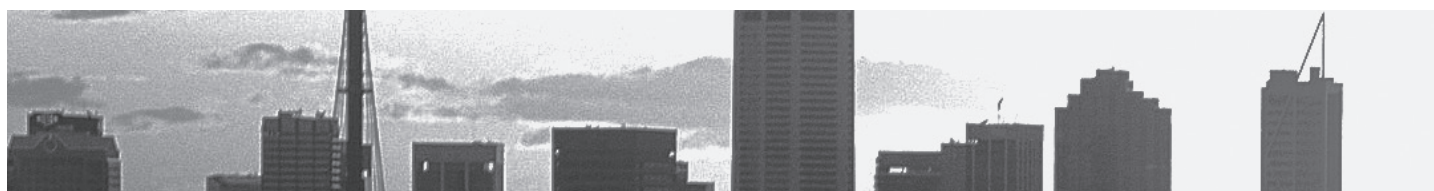
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THEME C: PREVENTING HIV

THEME C

POSTER NUMBER:
PAPER NUMBER: 481

A LONGITUDINAL CLINICAL PILOT STUDY AMONG MEN AND WOMEN ATTENDING A SEXUAL HEALTH CLINIC IN MT HAGEN, PAPUA NEW GUINEA

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A longitudinal clinical pilot study was conducted at Tininga Clinic, Mt Hagen Hospital in order to determine whether this site would be suitable for future large-scale longitudinal cohort studies. Key objectives were to investigate the acceptability of proposed clinical and laboratory procedures; to determine the feasibility of recruiting and following-up sufficient numbers of men and women at this site; and to obtain an indication of HIV/STI prevalences in these sub-populations to inform future research design.

Men and women with genital symptoms presenting to Tininga Clinic were invited to participate. Following completion of informed consent procedures, participants underwent a face-to-face interview, clinical examination and provided genital and blood specimens for STI diagnostics. All participants were invited to undergo voluntary counselling and HIV testing (VCT) with a trained counsellor at baseline, and asked to return for a clinical follow-up at 2-weeks and final visit at 12-weeks. In-depth interviews (IDIs) were conducted among a sub-set of participants at 12-weeks.

50 men (n=30) and women (n=20) were recruited. On examination, 31% (9/29) of men had a dorsal longitudinal foreskin incision. Among women, baseline prevalences of laboratory-confirmed genital and sexually transmitted infections were high (chlamydia, 21%; gonorrhoea, 26%; trichomoniasis, 32%; syphilis, 24%; herpes simplex type-2 (HSV-2), 35% and bacterial vaginosis, 42%). Among men presenting with urethral discharge (n=12), 67% had laboratory-confirmed gonorrhoea; 25% trichomoniasis; and 17% chlamydia. A total of 22 participants (9 women, 15 men) underwent VCT, all of whom were HIV sero-negative. Retention at 2-weeks was 84% overall (42/50; 18/20 women, 24/30 men); 60% (25/42) of participants who re-attended at 2-weeks returned for a 12-week visit. All those re-attending at 12-weeks reported that they would consider taking part in a future clinical study and would recommend participation to family or friends. IDIs with 5 men and 6 women indicated the acceptability of proposed clinical, laboratory and other study procedures.

Baseline characteristics of this study population suggest this may be a suitable setting in which to conduct large-scale longitudinal sexual health research. A screening round, locally-appropriate informed consent and community tracing procedures may help maximise cohort retention in this setting.





THEME C: PREVENTING HIV

Prior to 2000 – 2001 South Australia experienced relatively stable rates of new HIV diagnoses. Notifications since then have risen by a moderate but important amount. This echoes similar trends seen around Australia and in comparative countries around the world. New infections continue to be predominately diagnosed amongst gay men and other Men who have Sex with Men (MSM) between the ages of 30 – 50 years; as well as a proportion of newly infected people whom report acquiring HIV through heterosexual contact.

Targeted prevention education is a priority action area identified in the South Australian HIV Action Plan 2009 -2012 with the objective of reducing the transmission of HIV. In 2008, SA Health convened an action-based coordinating structure that brought together government, Non-government organisations, and community representatives to plan a coordinated response to the rise in notifications amongst gay men and other MSM. The coordinating body met over a 16 month period to examine the available quantitative and qualitative research in order to develop evidence based health promotion strategies, including: 1. Targeted prevention education, 2. Increased HIV and STI testing, and 3. Workforce development initiatives.

This poster will summarise the state wide, cross sector, partnership approach used in South Australia to develop prevention interventions to minimise HIV transmission. It will showcase the testing campaign developed for the 2008 FEAST – Adelaide Lesbian and Gay Cultural Festival, the 2010 condom reinforcement campaign and the detailed strategy action plan developed for implementation and monitoring by the HIV Interagency Taskforce over the life of the SA HIV Action Plan 2009-2012.

Among the limited published studies on condom use among Female Sex Workers (FSWs) in Indonesia, there is a wide range in the reported level of condom use among FSWs, from 19% to 78%. To our knowledge there has been no systematic review of these studies. This is important as differences in how the measurement of condom use was conducted in each study may have contributed to the wide range in percentage of condom use reported in the published literature. Through a review of the published literature, this study attempted to explore how the measurement of condom use was conducted, and offer recommendation for future research on how to study condom use.

We conducted a systematic review of studies published (in English) on condom use among FSWs in Indonesia from 1990 until 2010. We selected articles using keywords "condom" or "sex workers" and "Indonesia". Articles were retrieved from Proquest, Infomit, ISI Web of Knowledge, Sage, and Scopus and free online journals.

Methods of measurement of condom use varied widely among studies. All were done retrospectively, all of which used an interviewer-administered questionnaire. This method might be prone to recall bias and challenge validity due to social desirability issues. Recall period used to describe condom use also varied widely from "the last sexual relationship" to "the last two weeks". The categorization of condom use behavior was also varied. These impose a challenge to appropriate comparison among studies.

Standardization of recall period and categorization of condom use behaviors are needed in Indonesia for the country to appropriately assess the level of condom use among FSWs. Future studies should also consider the use of other more confidential methods to reduce the social desirability issue such as self-administered questionnaire, mailed survey, or telephone survey. The interview results might be clarified by using other methods of data collection such as observation of the level of condom use at the brothels, and providing a diary for FSWs to record themselves the level of condom use within certain periods.

POSTER NUMBER:
PAPER NUMBER: 254

STRATEGIES TO REDUCE RATES OF NEW HIV DIAGNOSES AMONG GAY MEN AND OTHER MSM IN SOUTH AUSTRALIA

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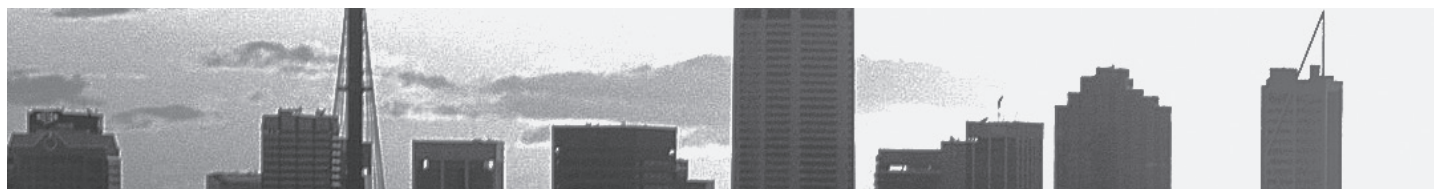
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POSTER NUMBER:
PAPER NUMBER: 510

CONDOM USE AMONG FEMALE SEX WORKERS IN INDONESIA: A LITERATURE REVIEW AND RECOMMENDATION FOR FUTURE RESEARCH

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THEME C: PREVENTING HIV

THEME C

**POSTER NUMBER:
PAPER NUMBER: 230**

HIV/AIDS PREVENTION EDUCATION IN INDONESIA: IS THE NATIONAL POLICY REACHING SCHOOLS AT THE LOCAL LEVEL?

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The HIV/AIDS epidemic in Indonesia is among the fastest growing in Asia. To respond the epidemic, the Indonesian Ministry of National Education developed a policy to provide HIV/AIDS education in schools in 1997. Even though there has been a national policy to provide HIV/AIDS education for the past twelve years, very few schools have implemented the program. A Survey of 110 Indonesian schools conducted by UNICEF in 2007 found only 10% of schools had implemented Life Skills Education (LSE).

This study explores how the national policy has reached schools in Makassar. This is a qualitative study using in-depth structured interview with 15 participants from the Local Department of National Education as well as principals and teachers from 5 High Schools in Makassar.

The Local Department of National Education, principals and teachers confirmed that there are no specific HIV/AIDS programs in schools implemented as a result of the national policy on HIV/AIDS. All programs related to HIV/AIDS are run by organizations from outside of Department of National Education such as the National Narcotics and Drugs Organization, National Family Planning Board, Primary Health Care Centre, Universities and NGOs. All participants are aware of the importance of this education and they believe that integrating HIV/AIDS prevention in subjects is the only way to deliver information about HIV. Having programs delivered by outside organisations makes teachers more comfortable, however all programs are conducted as one of sessions which teachers believe is not enough. This study found that most teachers do not have sufficient knowledge about HIV and the modes of transmission. Most teachers prefer and support abstinence to harm reduction in delivering information, and most believe that introducing condoms means encourages promiscuity which conflicts with moral and religious values.

This study shows that the HIV/AIDS National Policy has still not reached schools in Makassar. Teacher training with additional HIV/AIDS resources for teaching are recommended to support the success of HIV/AIDS prevention education in schools in Makassar.

**POSTER NUMBER:
PAPER NUMBER: 295**

CHINESE INVESTMENT IN NEEDLE AND SYRINGE PROGRAMS YIELD SUBSTANTIAL HEALTH AND FINANCIAL RETURN

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HIV epidemics in Asia have largely been spread through sharing injecting equipment. An epidemic quickly rose to prominence among injecting drug users (IDUs) in China after the first recognizable outbreak in China in 1989. As a harm reduction strategy needle and syringes programs (NSPs) were initiated throughout China in 2002. The effectiveness of NSPs in reducing the spread of infection in such an established epidemic is unknown. In this study we use data from Yunnan province, the province most affected by HIV in China, to (1) estimate the population benefits in terms of infections prevented due to the programs; (2) calculate the cost-effectiveness of NSPs from a governmental perspective.

We developed a mathematical transmission model, informed by detailed behavioral and program data, which accurately reflected the unique HIV epidemiology among Yunnan IDUs in the presence of NSPs. We then used the model to estimate the likely epidemiological and clinical outcomes without NSPs and conducted a health economics analysis to determine the cost-effectiveness of the program.

It is estimated that NSPs in Yunnan have averted approximately 16-20% (5,200-7,500 infections) of the expected HIV cases since 2002 and led to gains of 1,300-1,900 DALYs. The total \$1.04 million spending on NSPs from 2002 to 2008 has resulted in an estimated cost-saving over this period of \$1.38-\$1.97 million due to the prevention of HIV and the associated costs of care and management. NSPs are very effective and cost-saving in preventing HIV transmission among IDUs in China. Significant scale-up of NSPs interventions across China and removal of the societal and political barriers that compromise the effects of NSPs should be a priority of health policy for the Chinese government.





THEME C: PREVENTING HIV

Background: Active HIV testing services (AHTS) for men who have sex with men (MSM) are rare in China.

Objectives: To understand the efficacy of AHTS facilitated by Internet and voluntary counseling and testing (VCT) for MSM in China.

Methods: Between June and August 2007, identical banners containing study information were put on 2 gay websites and 1 gay online chatroom in China. MSM's phone number, email address, MSN, QQ (the most widely used online messaging software in China) was collected from gay cruising websites. We actively contacted MSM via their contact information and informed them of the study information with an invitation to participate. Consented participants were interviewed between 6 and 10 pm in a VCT center. One trained investigator spent 2 hours a day in recruiting participants via the Internet. Participants' demographic characteristics, routes of recruitment were recorded. HIV/syphilis counseling, testing and referring services were provided. All participants received 50 Yuan (about US \$7.5) and small gifts (condoms, lubricant, health booklet) for their participation.

Results: A total of 429 participants were recruited within 60 days. Most participants were under 30 years old (73.7%, 294/399), highly-educated (72.7%, 290/399), and never married (83.7%, 334/399). The ratio of the number of prospective participants contacted against that of the participants who actually participated in our study was 4:1 (168/46) via MSN/QQ, 6:1 (458/80) chatroom, 10:1 (328/33) phone, and 140:1 (2378/17) email. Motivation of participation was being concerned about own health (79.5%, 317/399), being concerned about MSM community (38.4%, 153/245), to communicate with health practitioners (20.8%, 83/399) and to get the incentive (2.76%, 11/399).

Conclusions: MSM in China are concerned about their HIV/STS status and tend to get tested for HIV/STIs when they know the presence of such services even without incentive. Internet and VCT facilitated active HIV testing is logistically efficient to scale up testing for MSM.

POSTER NUMBER:
PAPER NUMBER: 712

SHOULD INTERNET AND VOLUNTARY COUNSELING AND TESTING FACILITATED ACTIVE HIV TESTING SERVICES FOR MEN WHO HAVE SEX WITH MEN BE SCALED UP IN CHINA?

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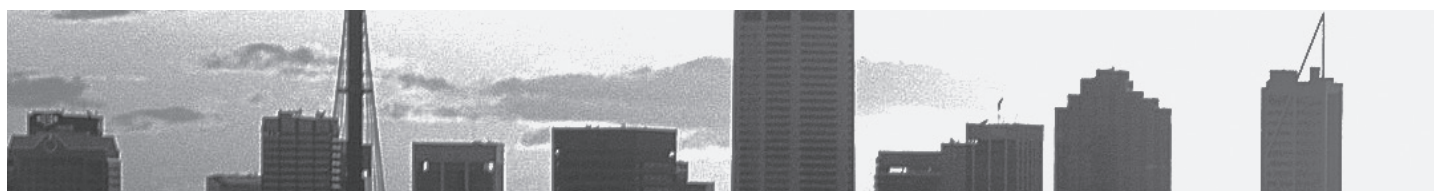
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THEME C



THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 717

THE IMPACT OF CAUSE-RELATED MARKETING ALLIANCES ON PUBLIC ATTITUDES TOWARD PEOPLE LIVING WITH HIV/AIDS

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Cause-related marketing (CRM) is a strategy that unites a corporation and a non-profit organization to engage in revenue-producing activities for the firm, a portion of which revenues will be donated to the non-profit organization. Nowadays, more than ever, this strategy emphasizes the notion of mutual benefits for each partner. Much of the literature supports the notion of mutual benefits but only a select few also introduce a third beneficiary. For some, cause-related marketing is not only a win-win situation for companies and organizations but a win-win-win situation, the third recipient being the public who gain appreciation for being involved in contributing to a cause. The present research investigates the relation or effects between the use of different forms of cause-related marketing and attitudes toward people living with HIV/AIDS. In order to better capture the causal relations an experimental design was chosen. This experiment is comprised of three independent variables, each containing two levels, controlled within an experimental context. The manipulated variables are perceptual fit (negative or positive), time commitment (short or long-term) and geographic scope (local or global). Our experiment is a 2X2X2 between-subjects factorial design. We also observed, rather than manipulated, existing attitudes toward the business partner, familiarity with the disease, general attitudes toward non-profit organizations, as well as concern for this particular epidemic and support for the organizations which address this challenge. All can have a moderating effect on respondents' attitudes toward a non-profit organization and the cause, in the context of a cause-related marketing partnership, and were therefore judged pertinent to examine. A total of 410 Canadian young adults were randomly selected to participate in the study. The results of this experimental study provide non-profit organizations acting in the HIV/AIDS field with a useful tool to assist them in devising successful cause-related marketing alliances. Because those organizations stand to reap substantial financial rewards from successful associations with corporations, the choice of such an associate is obviously a crucial one. However, as witnessed by this study's findings, this selection not only impacts their bottom line but also general public attitudes toward people living with HIV/AIDS.

POSTER NUMBER:
PAPER NUMBER: 91

PLEDGE FROM BURDEN

Banjade/shahi S

Srijansil Mahila Samuha , Nepal

'Srijansil mahila samuha' was formed by the group of 7 HIV infected women in 12th July 2007 to work for the HIV infected and affected women and children in Nepal.

Since its establishment 'SMS' is continuously raising awareness, providing 'care and support' advocating for human rights and 'stigma and discrimination'. Course of program includes : conducting monthly PLHA support group meeting among the women from different community, they are Transgender , Female IDU's, House wife , sexworkers and migrant worker to share the inner wealth for wellbeing of the new community we've been building with a new horizon. Each time the community gets a new shape with more complication and new brighter views needed thus, as a new step 'pressure group' (samuhik pairavi samuha) formed in 16th Jan 2009 to advocate the women rights in Nepal who are most vulnerable towards the violence and sexual diseases like STI and HIV/AIDS. SMS has been working as a loose network. Members from 15 women lead organisation affiliated with 'pressure group' raising a complete voice against women vulnerability and for the access of right at the grassroot level.

In the context of Nepal, Nepalese women were accustomed with the social, cultural and traditional norms. Women expressing about sex and sexual health is not acceptable thus the voice of suffering and grief remains underneath suppressed, which makes situation worse increasing the risk of vulnerability. Coordination with women from all sectors, helped to identify the challenges of women for responsive action as per need. At first committee organized 10 day signature campaign as a commitment towards the end of VAW (violence against the Women) and HIV prevention, nearly 4000 signatures collected including high government officials. In the contemporary situation FSW (Female sex work) is not legal in Nepal and we're facilitating with the government advocating FSW related issues.

To involve Feminist from all sectors is really challenging but it is possible to strengthen the network through the study related issues first and sound coordination and collaboration. We assume it as the pioneer step to bring positive social changes inside and outside the community.





THEME D: HIV IN POPULATIONS

In Vietnam there is limited data on the clinical outcomes of PLHIV on ART in Vietnam, the majority of whom are former or current IDU. FHI has been supporting the Ho Chi Minh City (HCMC) Provincial AIDS Committee (PAC) to provide clinical care to PLHIV, including ART, in a number of outpatient clinics (OPC) since 2005.

In 2006, FHI and the HCMC PAC recruited an open and dynamic observational cohort of patients initiating first-line ART at two OPC in HCMC. Participants were recruited at the point of initiating ART. Data collection was conducted at baseline (before initiation of ART) and then every six months out to 24 months. Data sources include one-on-one interviews by trained interviewers and data extraction from clinical records. Key data collected included social and demographic information, risk behaviors, clinical status, CD4 count, self-reported ART adherence, ART-related adverse events/side effects, and quality of life.

A total of 247 PLHIV were recruited, with 62% reporting a history of IDU. Eighteen died within the first 12 months (overall mortality rate 7.7/100 person years). Mortality rates were 9.2/100 person years in the first six months and 6.2/100 years in the following six months. Fourteen were lost to follow-up (5.2/100 person years) with the loss to follow-up rate being higher in the 6–12-month time period. All but one who was lost to follow-up were detained in mandatory drug rehabilitation centers. Immunological outcomes were excellent: baseline median CD4 count of the cohort was 45 cells/mm³, increasing to 203 cells/mm³ at 12 months. Fifty-four percent reported minor side effects from ART in the first six months, which reduced to 12% by 12 months. Overall, opportunistic infection prevalence decreased from 72% to 30%. Self-reported adherence to ART was high, with 99% reporting excellent (>95%) adherence. Heavy alcohol use was reported by 60% at 12-month follow-up. Self-reported current IDU rates were found to be low.

IDU in Vietnam can experience significant clinical and immunological improvement on ART. An unexpected finding was the heavy reported alcohol use in this cohort. HIV programs need to consider screening for alcohol use in routine care.

The National HIV/AIDS policy, strategy, action plan and program on prevention, care and support in Bangladesh that was initiated in 1997 does not include people with disability as one of the vulnerable target segment. An estimated 10% or 14 million of the population is disabled people in the country and 87% of them live in rural area and are poverty stricken. Theoretically, they are integrated in all the basic service policies for education, health and employment but in reality have no or very limited access to these services.

Gender is a cross-cutting aspect in the human development agenda of the country but women with disabilities are at a higher risk of HIV infection due to lack of awareness, sexual violence and coercion because of absence of social security and coverage by the traditional HIV/AIDS programs. The current status is worsened because of internal migration and mobility due to loss of livelihood caused by environment degradation and climate change impact creating additional disability related burden and marginalization for the household and women with disability.

There is tremendous paucity of research, study and data on HIV/AIDS and disability, within this context the paper examines the condition of access to information and services by disabled youth 15 – 24 years especially women to HIV/AIDS infection prevention, risk of exposure and care and needed support. It considers enabling environment for disabled people for confidential and appropriate HIV prevention, reproductive and related health services package under the national essential service provision and the socio-cultural discrimination for attaining those. The study is primarily based on secondary data for availability of education, HIV/AIDS and reproductive health services for people with disability.

People especially women with disability perpetually face the challenges of physical, attitudinal and organizational barriers for accessing the services, enhancing their vulnerability. The paper presents possible solutions as delineated through interviews that is purposively sampled for visually impaired women and concludes; that mass campaign, outreach, capacity building for service, infrastructure for accessible facilities and education and training of the policy makers and administrators can integrate people with disabilities within mainstream HIV/AIDS program.

POSTER NUMBER:
PAPER NUMBER: 260

**“GIVE US A GO - WE CAN DO WELL
ON ART TOO” - IDU IN VIETNAM
EXPERIENCE GOOD CLINICAL AND
IMMUNOLOGICAL OUTCOMES ON
ART**

Burdon R

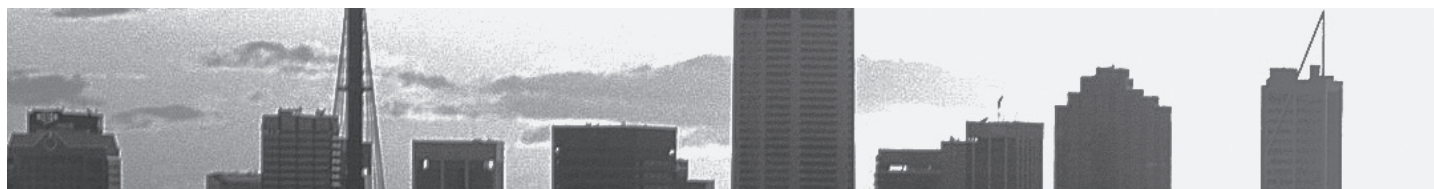
Family Health International Vietnam

POSTER NUMBER:
PAPER NUMBER: 73

**THE PAUCITY IN HIV/AIDS
PREVENTION, CARE AND SUPPORT
AND TREATMENT SERVICE
REGIMEN TO ENCOMPASS THE
VULNERABILITY OF PEOPLE WITH
DISABILITY**

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THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 303

MARKET ECONOMY AND SPATIAL TRANSFORMATION IN CHINESE GAY MEN'S LIFE

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Post-Maoist China has experienced dramatic social change and has embraced a market-oriented economy since the 1980s. This institutional economic reform has brought about extreme changes in the lives of Chinese people including sexuality. For closeted gay men in particular, sexuality has become a specific underground commercialised industry within the context of the market economy.

This paper examines the relationship between market-oriented economic development and homosexual spatial transformation. It will explore the construction of gay men's sexual identity through this spatial transformation over the past 30 years, and how homosexuality has been commercially exploited and has become a same-sex industry. The paper arises from two years' field work among gay men and non-identifying men who have sex with men in Shenyang (north), Chengdu (west), Hangzhou (east) and Shenzhen (south). In the study we carried out Individual in-depth Interviews and focus group interviews among 120 cases. Historical literature analysis was adopted to obtain the historical data and its relation with gay men's current existence and cultural adaptation.

Here we discuss three issues arising from the research. First we examine the momentous social transformation wrought to traditional homosexual "social sites" and to traditional ways of socializing among gay groups in the 1980s, and how Chinese gay identity was constructed within the specific articulation of Chinese reform and opening up to the discourse of global sexuality. Second, we explore how continuously increasing entertainment industries have provided new and bigger social spaces for self-identified gay men as well as other new kinds of same sex services. Third, we analyse the relationship between the market economy, the same-sex industry, and gay men's space. We explore how, while still illegal in China, the prosperous same-sex industry has created a complicated, and often hidden sexual network through commercial spaces (home-based brothels, gay bathhouses, and gay bars) throughout the country. Spatial transformation of homosexual sociality resulting from the new market environment provides spaces that facilitate articulation of sexual identity, same sex behaviours, entwined with economic consumption.

POSTER NUMBER:
PAPER NUMBER: 471

IMPACT OF REDUCTIONS IN ANTIRETROVIRAL THERAPY AVAILABILITY ON THE HIV EPIDEMIC IN PAPUA NEW GUINEA

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Over the last two decades Papua New Guinea (PNG) has experienced a rapidly expanding HIV epidemic. Fortunately, recent estimates suggest there has been a levelling out of HIV prevalence in PNG at approximately 1% following the roll-out of intervention programs and the successful scale-up of antiretroviral therapy (ART) services across the country in recent years. However, in early 2010 PNG did not secure external funding for the continuation of its ART programs meaning that supplies of ART drugs could potentially be completely depleted during 2010. This is likely to have a large impact on the health and well-being of HIV-infected people in PNG and potentially result in a worsening epidemic. We investigated the potential impact of reductions in ART availability using a mathematical model of HIV transmission in PNG. This model was calibrated and fitted to reproduce the estimated HIV prevalence and incidence, the number of diagnoses, the number of people who have started ART, and the estimated number of people who require treatment in PNG from 1990 to 2009. Future scenarios where the number of people on ART increases according to current trends (representing baseline), the number of people who receive treatment remains constant, the number of people who receive ART decreases by 50%, and the number of people who receive ART decreases by 90% were evaluated. Such reductions in the number of people receiving ART will increase HIV incidence. These increases are unlikely to be substantial and only slightly worsen the overall epidemic in PNG. But more importantly there could be large increases in the number of AIDS-related deaths with an 55%, 78%, 117% increase in AIDS deaths after 5 years compared to baseline if the number of people on treatment remains constant, decreases by 50%, or decreases by 90%, respectively. These results highlight that funding for ART drugs and services must be maintained in PNG to prevent a large number of AIDS-related deaths and a worsening of the HIV epidemic in PNG.





THEME D: HIV IN POPULATIONS

Adherence is vital for the success of antiretroviral therapy (ART), and in South Africa is critical to avoid virological resistance developing as there are few second-line treatment options available to public sector patients. Various adherence support paradigms with varying levels of success have been suggested. This study assessed the impact of a community-based adherence support program on the outcomes of patients on ART.

A retrospective cohort study using patient clinical records was conducted. Twelve public-sector ART sites with community-based adherence support services provided by patient advocates (PAs) and 14 sites without PA services were selected. Patient-level analyses included comparing rates of patient retention, virological suppression (viral load < 400 copies/ml), rates of missed appointments, and treatment-pick-up rates between patient groups with and without PA services. Site-level comparisons involved comparing the duration of time that patients maintained a suppressed viral load and the median duration of retention in care between health facilities with and without PA services.

540 patients (64% women) with individual level data were included in the study (313 who had exposure to an adherence supporter and 227 who did not). The median duration of treatment was 9 months. Patient-level comparison results included: a significantly higher proportion of patients having a PA were virologically suppressed at six months of treatment (70% compared to 30%, $P = 0.001$); and a significantly higher proportion of patients with PAs attained a treatment pick-up rate of over 95% (89% compared to 67%; $\chi^2 = 6.131$; $p = 0.021$). Site-level comparisons showed that patients at health facilities with PA services maintained a suppressed viral load for a longer period (235 days compared to 199 days; $\chi^2 = 143.46$; $P < 0.001$) and patients at health facilities with PA services remained in care for a longer period (median 561 days compared to 455 days; $\chi^2 = 124.27$; $P < 0.001$) compared to patients at health facilities without PA services.

Integrated community-based adherence support is important to ensure that ART patients remain in care, are virologically suppressed and regularly pick up their treatment from clinics.

Over the past 20 years no studies in Indonesia have explored the issue of internal stigma for people living with HIV (PLWHA), and only a few studies in Indonesia have explored stigma and discrimination. Understandings about stigma and types of stigma are still very limited. A recent study conducted in Makassar in 2007 found that stigma among PLWHA is very high, with 78% from general population, 35.5% from health providers reporting some form of stigma.

Internal stigma is a complex and subtle phenomenon, affecting many people living with HIV around the world. It is influenced by external stigma and a combination of social, community, and personal factors, some of which may be intrinsic to an individual living with HIV.

PLWHA with internal stigma may feel a range of conditions, such as: self exclusion, negative perception of self, social withdrawal, over compensation and fear of disclosure

Internal stigma is complex, and any person diagnosed as HIV-positive may experience some form of it. Internal stigma can disempower people living with HIV. Individuals may blame themselves for their experiences with stigma, even to the point where they cease to assert their right to treatment and other social and medical services. HIV- positive people who accept society's negative characterizations may blame and treat themselves poorly even to the extent that they feel that they deserve mistreatment.

This research explores factors which increase and reduce self stigma among PLWHA in Makassar, Indonesia. This research used both quantitative and qualitative methods. The study began with 30 PLWHA completing a self administrated questionnaire, developed by UNAIDS which measured their level of internal stigma. (USAID POLICY Project et al., 2003) Eight in-depth interviews were then conducted which explored the issue of internal stigma in more depth.

Participants reported increased self stigma due to religion (100%), rejection from the family (66%) , socio economic level (75%) and how the media represent for PLWHA (86%). In contrast, participants reported on a range of factors which reduced self stigma, such as; support from family (90%), individual values such as being patient in facing problem (68%) and spirituality such as feeling connection with GOD. Religion dominated many respondents answers whereby 100% of respondents stated that their religion (Islam) is the greatest influence for self blame and for feeling self stigma.

**POSTER NUMBER:
PAPER NUMBER: 222**

AN EVALUATION OF THE IMPACT OF A COMMUNITY BASED ADHERENCE SUPPORT PROGRAMME ON ART OUTCOMES IN SELECTED GOVERNMENT HIV TREATMENT SITES IN SOUTH AFRICA

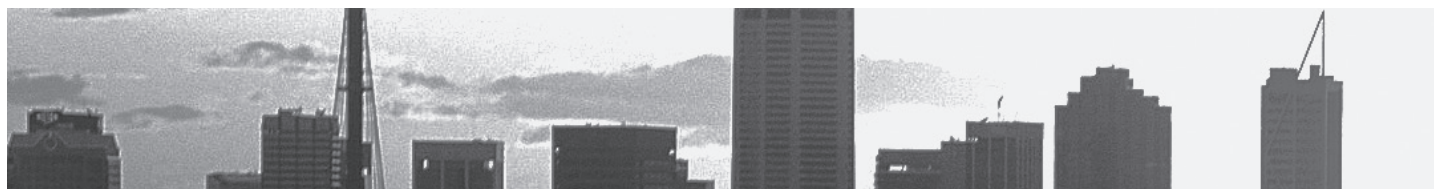
Igumbor JO, Scheepers E, Ebrahim R,
Jason A, Fatti GL and [Grimwood A](#)

**POSTER NUMBER:
PAPER NUMBER: 127**

RELIGION AND SELF STIGMA AMONG PLWHA IN MAKASSAR, INDONESIA

[Hamid, Aty.](#)

Hasanuddin University



THEME D: HIV IN POPULATIONS

THEME D

**POSTER NUMBER:
PAPER NUMBER: 104**

RISK FACTORS FOR HIV-1 INFECTION IN INDIA: EVIDENCE FROM THE NATIONAL FAMILY HEALTH SURVEY 3

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The epidemic in India has been reported to be rather heterogeneous however there have been limited attempts to explore the differences in the distribution of the HIV related risk factors in the general population. The main objective of the present study is to determine the differences in the distribution of the risk factors for HIV1 amongst seropositive and seronegative individuals in India and measure the strength of their association to the serostatus.

Data from NFHS3 survey was analyzed. This was the first population based survey to perform HIV serotesting in the general population. The final sample analyzed in this study consisted of 52,853 women and 50,093 men, for whom complete responses for the outcome as well as covariates was available. Multiple logistic regression with HIV-1 seropositivity as a dependent variable was used to analyze the strength of association between HIV-1 infection and various risk factors, controlling for potential confounders.

The proportion of HIV positive individuals was highest in the age group between 24-35 years. We found that the odds of HIV infection were higher amongst the urban dwellers in both the sexes [OR 1.51(male) & 1.27 (female)]. Men and women who had higher levels of education were at a significant lower risk of HIV infection [OR 0.13(male) & 0.18 (female)]. Economic status was not found to typically correlate with the outcome of HIV. Employed individuals were at a significantly increased risk of HIV infection. Women with history of genital ulcer or sores were significantly associated with increased risk of HIV (OR 3.34). Male circumcision was found to be associated with a lower risk (OR 0.51), the overall estimate was however not found to be statistically significant. Amongst women, having a higher number of sexual partners or being sexually active was associated with a significantly increased risk of being HIV positive.

HIV is a multidimensional epidemic, with demographic, social, biological, and behavioral factors exerting influence on individual probability of becoming infected with HIV. An understanding of these factors is important for both programs and policies.

**POSTER NUMBER:
PAPER NUMBER: 24**

FUNCTIONAL ANALYSIS OF HIV/ AIDS STIGMA: CONSENSUS OR DIVERGENCE?

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Functional theory proposes that attitudes may serve a variety of purposes for individuals. This study aimed to determine whether stigmatized attitudes towards HIV/AIDS serve the same function for all (consensus function) or serve different functions for different individuals (divergence function) by assessing various aspects of HIV/AIDS stigma using a sample of 236 adults aged 20-65 years from Iranian community living in Sydney, Australia in 2007. Respondents were classified as evaluatives or expressives based on their responses to attitude function inventory scale. HIV/AIDS related attitudes in the study group were found to have more of an expressive (58.5%) than an evaluative function (32.2%). Multiple regression analyses revealed that various aspects of HIV/AIDS stigma were functionally divergent within the study group and could serve evaluative and expressive function. The study's findings suggest that different messages should be presented to different audiences depending on whether the stigma performs an expressive or evaluative function.





THEME D: HIV IN POPULATIONS

South Sulawesi has one of the highest numbers of reported AIDS cases among all provinces in Indonesia, and Makassar—the capital city—is experiencing one of the most rapid increases of HIV/AIDS cases in Indonesia. Female sex workers are a vulnerable group at high-risk of contracting HIV/AIDS, and lesbian sex workers are part of this group which we know very little about. This study explores vulnerability of lesbian sex workers to HIV/AIDS by examining their risk behaviours, risk environment of their workplaces, their protection method, their access to information and support regarding HIV/AIDS prevention and workplace policies concerning HIV/AIDS protection. The study also aims to establish whether lesbian sex workers experience any forms of discrimination or isolation that may make them more vulnerable to HIV/AIDS compared to non-lesbian sex workers.

The methods used included in-depth interviews with key informants and lesbian sex workers from different types of karaoke bars and observations of their activities and workplace environments. The result shows that vulnerability of lesbian sex workers to HIV/AIDS relates partly to the perception that lesbian sex workers do not engage in sex with customers since they are commonly seen as waitresses rather than as sex workers. As a result, the provision of HIV/AIDS information is typically considered insignificant by karaoke bar owners. Recognition of bar owners and managers that these women are lesbians also leads to the misperception that they are less at risk of contracting HIV. For lesbian sex workers, their own misconceptions about HIV/AIDS influence their lack of protective methods. Thus, the main form of discrimination observed among this group, which is lack of access to prevention programs and education, is due to the policies of karaoke bars. To impede the multiplication of HIV/AIDS in Makassar, HIV/AIDS prevention program within lesbian sex workers' workplaces is urgently needed, regardless of the number of women employed and whether or not they are recognised as lesbian, sex workers or just waitresses.

The East New Britain Sexual Health Improvement Project (ENBSHIP) partners with the East New Britain Provincial Health Office and is funded by AusAID. The project supports provincial, district and community level initiatives to strengthen health services and expand the community response to Sexually Transmitted Infections (STIs).

Community mobilisation is based on a lengthy engagement process through local leadership structures at the District, Local Level Government and Ward levels. At community level, ENBSHIP works through activators or 'Stret Tokers' who are selected by their communities then trained to raise awareness of STIs and build a bridge between communities and health services. Training covers basic knowledge of community development, gender and STIs and highlights the complex issues which underpin transmission and treatment seeking behaviour. Stret Tokers are supported to mobilise their communities to respond to these issues.

After completion of activities in the first of four target districts approximately 18,500 condoms had been distributed and more than 300 people had been referred to health facilities. Close to 75% of participating Stret Tokers were judged 'active' at completion of training. Positive outcomes include:

- Recognised shifts in religious and cultural beliefs and values relating to sexual health;
- Recognition of family violence as an important gender issue impacting on STI infection rates;
- Strengthened relationships between Stret Tokers and health workers, leading to informal referral pathways;
- Improved levels of trust between health workers and villagers;
- Development of individual Stret Tokers' capacity to speak publicly about traditionally sensitive issues.

Numerous challenges of the project include prevailing cultural resistance to condom promotion, high community expectations, and poor understanding of the 'volunteer' concept. Important lesson have been learnt, especially about the community engagement process and the intersection of gender based violence and sexual health issues.

ENBSHIP has demonstrated the value of taking sexual health promotion to the village level while also strengthening health services. While the initiative has been met with great enthusiasm and has received excellent support from host communities, there have been many challenges and lessons learned of potential value to other community interventions in Papua New Guinea.

POSTER NUMBER:
PAPER NUMBER: 59

"DOUBLE-SIDED:"VULNERABILITY OF LESBIAN SEX WORKERS TO HIV/AIDS IN MAKASSAR, SOUTH SULAWESI, INDONESIA

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POSTER NUMBER:
PAPER NUMBER: 319

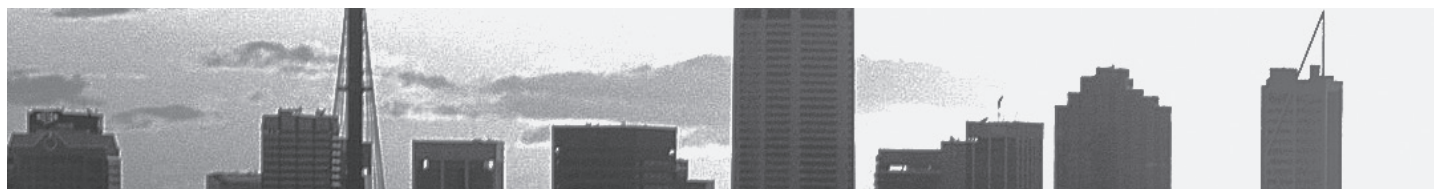
MOBILISING COMMUNITIES FOR SEXUAL HEALTH IMPROVEMENT IN EAST NEW BRITAIN, PNG.

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THEME D: HIV IN POPULATIONS

THEME D

**POSTER NUMBER:
PAPER NUMBER: 494**

THE COMMERCIAL SEXUAL EXPLOITATION OF CHILDREN IN FIJI

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This paper is based on a study of 104 children aged between 13 and 17 who are involved in commercial sex in Fiji. The paper examines and outlines the socio-demographic characteristics of the children. It further explores the pull and push factors that contribute to the children being exploited as commercial sex workers. The study examines the community's involvement and how the community can contribute to assisting in the prevention of this illegal activity.

**POSTER NUMBER:
PAPER NUMBER: 500**

HIV AND SOLDIERS ON OVERSEAS PEACEKEEPING MISSION: A FOCUS ON THE FIJI MILITARY FORCE

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The Fiji Military Force Soldiers have been a very mobile population over the last 30 years. Fiji's involvement in Peacekeeping missions expects the soldier to be on a tour of duty (TOR) mission for six months in some countries and for one year in others. This paper examines sexual practices in the soldiers while they are away from their families. It examines the life stories and case studies as presented by the soldiers and outlines their sexual behaviours while on TOR. The paper also discusses the approach taken by the institution to ensure that the soldiers are well informed about HIV and the risk behaviours it is associated with. Although the government identified the members of the military force as a risk group the military however does not have in place good strategic programs and institutional structures to help soldiers to better understand HIV and the risk practices.

**POSTER NUMBER:
PAPER NUMBER: 107**

HIV/AIDS IN INDIA- SITUATION ANALYSIS AND ROAD AHEAD

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India has largest number of AIDS patients in Asia and second largest number in world. First AIDS case was detected in year 1986, following which the National AIDS Control Organization (NACO) was constituted under National AIDS Control Committee (NACC) was constituted by Government of India.

As the epidemic spread, NACO launched, India's first National AIDS Control Programme (NACP-I) in 1992-1999, with the objectives to control the spread of HIV infection. It helped in capacity building at state level, infrastructure development, STD clinics establishment and sentinel surveillance. As the epidemic was not contained hence it was followed by NACP II (2002-2007).

Second phase of the programme focused on high risk group i.e. Intravenous drug users, commercial sex workers, men having sex with men, management of sexually transmitted diseases. It also initiated the targeted interventions along with some policy initiatives like National AIDS Prevention and Control Policy (NAPCP), National Blood Policy (NBP). A strategy was also formulated for greater involvement of people living with HIV/AIDS. National Rural Health Mission (NRHM) was also made part of the programme.

NACP III (2007-12) is the ongoing/ present phase of the programme. Epidemic is now seems to be getting stable due to previous national AIDS control programmes, i.e. number of people living with HIV/AIDS has come down to 22.7 per 100,000 population from 27.3 per 100,000 in year 2002. The Current focus of the programme has now been shifted to reverse the epidemic and to provide care and support to the people living with HIV/AIDS.





THEME D: HIV IN POPULATIONS

PNG is currently having HIV epidemic. The effects of HIV infection on children in RLS like PNG can be catastrophic when their parents are affected by HIV. No studies regarding clinical outcome of HIV infection in children in PNG were published since ART was introduced to PNG in 2005, making it the focus of this study.

A retrospective descriptive observational study carried out at PMGH, main referral hospital of PNG, serving more than 500,000 people. Clinical parameters were assessed to evaluate outcome.

285 children registered. 119 (42%) were HIV antibody positive, 95 (34%) were yet to turn 18 months for HIV antibody testing and 69 (24%) defaulted. 104 infants went through prevention of parent to child transmission (PPTCT). 24/104 (24%) tested at 18 months while 79 were yet to turn 18 months for first testing; 16/24 (66%) were HIV negative of which 11 were discharged at two years of age when HIV antibody test was negative while 5 were yet to turn two years for final testing. 8/24 (33 %) tested HIV positive; 4 on ART while 4 were clinically well and were followed up at clinic. 66 children were receiving ART during study period. All children who received ART gained weight. 29/66 children on ART died; 52 % (n=15) of them were less than one year. 26/66 (90%) were in World Health Organization clinical stage 3 at commencement of ART and 83% (n=24) had marasmus.

Most children on ART who died were \leq one year of age. Malnutrition and tuberculosis were main causes of death in such children. Case fatality rate of HIV in children in PNG is 16.2%. Two third of children who went through PPTCT intervention were HIV negative at 18 months of age.

In the Pacific Islands more than 65% of HIV cases are between 20 and 35 years. More than 50% of HIV cases in Solomon Islands are between 20 and 35 years. Most tertiary students at Solomon Islands College of Higher Education (SICHE) are between 20 and 35 age bracket, therefore they are also at the centre of the HIV and AIDS pandemic.

The study examine How SICHE in Honiara, Solomon Islands respond to the HIV and AIDS pandemic in relation to an institutional HIV and AIDS policy and curriculum and what lessons can be learned from the high prevalence Sub-Saharan Africa and the Caribbean tertiary and higher education institutions responses to HIV and AIDS?

Findings from this case study revealed SICHE neither have nor plans to develop a HIV and AIDS policy and curriculum, because HIV and AIDS is not perceived as a threat to SICHE; however, there is evidence from the study which is alarming because of high risk behavior practiced among students at SICHE. Data analysis revealed that 73% of respondents reported have multiple sex partners on campus, 52% reported knowing someone having sex for favors from both students and staff, 70% knew students who fell pregnant in 2007 and 62% do not use condom when having sexual intercourse. Although the level of HIV and AIDS knowledge is high, there is a gap between knowledge and behavior as revealed in this case study. There were also no HIV campaigns at SICHE since 2006. These results emphasized the need for a holistic approach in addressing the social and economic determinants that continue to put students at risk of HIV infection. Denying this fact may further escalate high risk behavior and vulnerability of these students. The study concludes with policy implications of these findings and further research.

**POSTER NUMBER:
PAPER NUMBER: 37**

**OUTCOME OF HIV EXPOSED
AND INFECTED CHILDREN
AT A RESOURCE LIMITED
SETTING (RLS); PORT MORESBY
GENERAL HOSPITAL (PMGH),
PAPUA NEW GUINEA (PNG)
THREE YEARS AFTER ANTI-
RETROVIRAL THERAPY (ART)
WAS INTRODUCED.**

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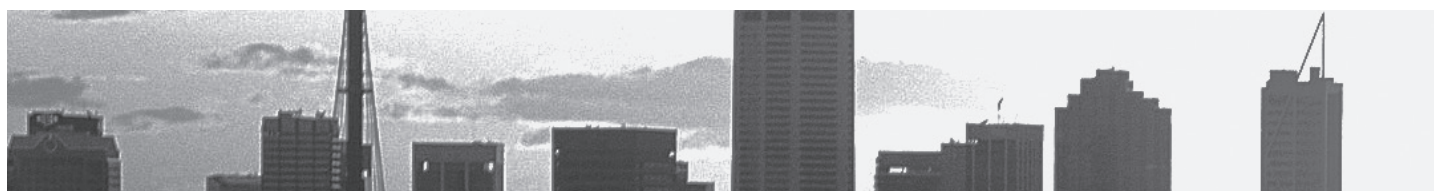
**POSTER NUMBER:
PAPER NUMBER: 564**

**"SOLOMON ISLANDS COLLEGE
OF HIGHER EDUCATIONS POLICY
AND CURRICULUM RESPONSE TO
HIV AND AIDS PANDEMIC".**

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THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 579

FACTORS ASSOCIATED WITH CONSISTENT CONDOM USE WITH CLIENTS AMONGST FEMALE SEX WORKERS IN SIEM REAP, CAMBODIA

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HIV prevalence amongst female sex workers (SW) in Cambodia was estimated at 21.4% in 2003, when it was the highest amongst any group in the country. This study aims to investigate the risk factors associated with unprotected sex with clients amongst SW in Siem Reap to inform the design of intervention programs.

Questionnaire-based data was collected in 2002-2007 from consenting direct SW (DSW) and indirect SW (IDSW) at the Cambodian government's Mondol Moi VCCT (voluntary confidential counselling and testing) health centre in Siem Reap. IDSW work primarily as beer sellers, karaoke singers or masseuses, but occasionally accept money or a gift in exchange for sex; DSW have sex work as their main occupation.

Separate logistic regression analyses for factors associated with consistent condom use with clients in the usual week (dichotomised into "always" versus "not always") were performed for 647 DSW and 633 IDSW.

Those DSW who earned >200 USD/month, and/or worked in highly compliant brothels (with DSW who regularly attended VCCT) were least likely to have unprotected sex, while those in "small" non-brothel establishments (mostly restaurants, small nightclubs/karaoke bars or massage parlours) were at highest risk. Amongst IDSW, karaoke singers were least likely to have unprotected sex. Married SW had the lowest risk of unprotected sex with clients.

Indicators of HIV knowledge that were significantly associated with protected sex with clients for both DSW and IDSW were: 1) proper condom use protects against AIDS; 2) a healthy-looking person can be infected with HIV; and 3) mosquito bites cannot transmit HIV. Only the knowledge that genital ulcers or sores is a symptom of STI in women remained a significant predictor in the IDSW model.

Several factors (socio-demographic, work environment, knowledge and access to health promotion programs) were associated with consistent condom use with clients amongst sex workers in Siem Reap. Results indicate that education-based intervention programs had an impact on protective sex behaviour, but a multi-faceted approach may be necessary to promote health and reduce the incidence of HIV (e.g. improving the work conditions of SW, in addition to health education).

POSTER NUMBER:
PAPER NUMBER: 101

"IS UNDERSTANDING GOOD ENOUGH?": HIV/AIDS RISK BEHAVIORS AMONG MEN WHO HAVE SEX WITH MEN IN MAKASSAR, SOUTH SULAWESI, INDONESIA

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In 2009, it was estimated that up to 5,730 men in South Sulawesi were infected with HIV due to sex with another man. This is estimated 44 percent of all HIV infections in South Sulawesi. This study explores risk behaviour among MSM by documenting their risky behaviours to HIV/AIDS, method of protection and methods of finding partner as well as preferred relationship.

By using qualitative research approach, I combined two data collection methods: observation of their meeting point environment as well as how they approach each others and in-depth interviews with a key informant and ten men in Makassar. Particular attention was given to interview a diverse group of men, including professionals, students, and unemployed men. The study shows that multiple partners and unprotected sex are among many risk behaviours practiced by these men. Despite the fact that these men have relatively good knowledge on sexually transmitted infections, including HIV and AIDS, the practice of un-protective sex persist, evident by low use of condom and lubricant. These men also vary in terms of "long term" and "one night stand" relationships. In addition, instead of "long lasting" relationships, "one night stand" is preferred. Social networking predominately through friendships or the internet is an important way to find sexual partners which is usually confidential. To prevent the increase number of HIV/AIDS in Makassar, HIV/AIDS prevention program within MSM is essential.





THEME D: HIV IN POPULATIONS

People from culturally and linguistically diverse (CALD) backgrounds are recognised as a priority population in the NSW and Australian HIV/AIDS strategy. Globally, UNAIDS estimates that over 95% of new HIV infections occur in low- and middle-income countries. Permanent and temporary migration from these low- and middle-income countries is set to continue in Australia. Consequently, HIV health promotion and access to testing, treatment and care will need to continue to adapt to the emerging epidemic of HIV among people from CALD backgrounds. We describe the epidemiology of new HIV infections in people from CALD backgrounds in NSW between 2000 and 2008 to inform these strategies.

Information on newly diagnosed HIV infections from HIV notification data were used for this study. We divided cases into Australian born, persons born in high income countries and persons born in low/middle income countries based on World Bank classifications. We then compared these three groups by sex, age group, location at diagnosis, reported exposure category and stage of HIV diagnosis.

Between 2000 and 2008, 2,906 of the 3,397 newly diagnosed HIV infections in NSW (86%) had a country of birth reported from 102 different countries. Two-thirds of these cases were Australian born; 17% born in high income countries and 21% born in low/middle income countries. Cases born in high income countries were similar to the Australian-born cases, and were predominantly men reporting homosexual acquisition of their HIV infection. Both these groups were different to cases born in low/middle income countries who were younger, more commonly female, reported heterosexual acquisition of HIV and were diagnosed later in their infection.

Categorising cases in NSW by the income of their country of birth largely mirrors the dominant pattern of HIV transmission in their home countries or regions. This is useful as a model to understand and target responses to HIV in CALD populations in NSW and suggests that the public health response in NSW and Australia should focus on the priority CALD communities drawn from low and middle income countries.

Most Pacific Countries legal systems still do not provide adequate protection of the rights of, Men who have sex with Men (MSM) and Transgender.

Many Pacific countries have inherited legislation that criminalize high risk behaviour, in spite of legislation review and reform in some countries, as in the case of Papua New Guinea HIV AIDS Management and Protection Act, most legal systems do not provide adequate protection of the rights of these most at risk groups. Fear of stigmatization, discrimination and legal retribution reduce access for MSM and Transgender to HIV prevention services such as awareness campaigns regarding HIV, condom use and VCT services.

The creation of conducive and enabling legal environments throughout the Pacific will enable dissemination of MSM and Transgender friendly prevention messages and accessible treatment care and support services.

The founding of the Pacific Sexual Diversity Network (PSDN) in 2007, which is currently made up of informed MSM organisations, individuals and informed groups from around the Pacific continue to provide access to knowledge, resources and regional international advocacy for policy and legislation change through the much publicised PSDN Advocacy Report. They have also promoted the following: A greater understanding of laws affecting MSM and Transgender and how it increases vulnerability to HIV and AIDS. Addressing stigma and discrimination and what role the law can play.

Discrimination as a Public Health Strategy.

Pacific Island countries must undertake legislative and enforcement mechanisms for MSM and Transgender as a matter of priority and progressive legislative legal reform to repeal legislation that criminalize high risk behaviour and HIV related discrimination.

POSTER NUMBER:
PAPER NUMBER: 346

HIV PATTERNS AMONG CULTURALLY AND LINGUISTICALLY DIVERSE POPULATIONS IN NSW, 2000-2008

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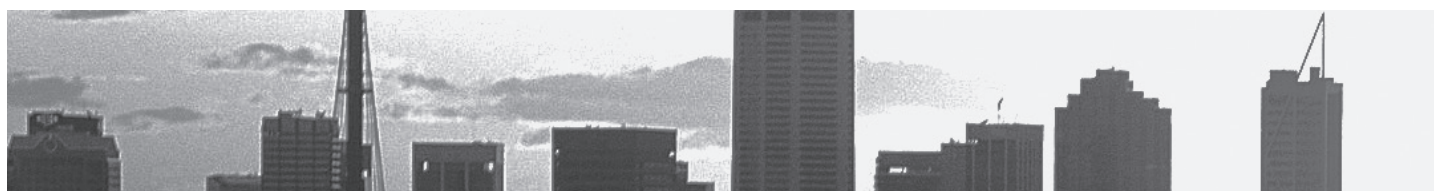
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POSTER NUMBER:
PAPER NUMBER: 581

LEGISLATION AND THE ENABLING ENVIRONMENT FOR PACIFIC MEN WHO HAVE SEX WITH MEN AND TRANSGENDER.

Moala E



THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 625

HARM REDUCTION IN AN IDEAL WORLD: USER'S PERSPECTIVE

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Harm reduction and drug treatment programs are increasingly being adopted throughout Asia in regional and country responses to the epidemic of HIV among people who inject drugs. Programs and services vary greatly in their approaches, and the ways in which people who use drugs access them also varies. They range from peer-led organisations accessing their own communities through outreach, advocacy and education to forced use of government managed programs. The efficacy and appropriateness of different strategies being used to prevent HIV transmission and manage drug use and HIV among people who use drugs is open to debate. This presentation will seek to identify some of the qualities that make harm reduction and drug treatment programs both effective and attractive from the perspective of the affected communities. It will also identify some of the barriers and issues that lead to programs failing in their objectives using examples from around the world.

POSTER NUMBER:
PAPER NUMBER: 516

PREVENTION OF MTCT HIV IN JAPAN "A PRESENT SITUATION AND NEXT AIM"

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K^{1,10}, Yoshino N^{6,10}, Natori M^{5,10},
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The human immunodeficiency virus (HIV) epidemic in Japan is still at a low level, but the number of newly identified infections is increasing every year. According to the report of the National AIDS Surveillance Committee, 15,451 HIV/AIDS patients were reported between 1985 and 2008, and 1557 new cases were reported in 2008 alone. In 2008, the HIV prevalence in Japan was estimated at 0.012% and 0.004% in women. In these 25 years, an universal HIV test for pregnant women to prevent mother-to-child transmission (MTCT) has been prevailed by our cooperate group. The HIV testing rate was 73.2% in 1999 but it was rose up to 98.5% in 2008.

We also followed most of all HIV infected pregnant women in Japan. Forty six cases of MTCT have occurred in 399 deliveries since 1987. Only 9 in 46 (19%) MTCT cases had been tested for HIV before delivery. Almost all MTCT cases were not treated with complete preventive methods. For example, concerning the mode of delivery, MTCT has occurred in only one in 220 (0.5%) cases of elective CS, one in 18 (5.6%) cases of emergency CS, and 6 in 29 (20.7%) cases of vaginal delivery.

In our PMTCT HIV guideline, all pregnant women are tested for HIV during the first trimester, HIV infected pregnant women are treated with antiretroviral therapy (ART), elective cesarean section (CS) for delivery and new born babies are given formula milk and treated with zidovudine syrup for 6 weeks. There was no MTCT case with all preventive procedures completely since 1987. But some protocols are controversial. And now we are faced with some new problems, e.g. correspondence of false positive, any influence of ART exposed HIV negative babies and complications caused by repeat CS. Hence PMTCT guideline is depends on social and medical background in each country. In our slides, Japanese national data for HIV pregnant women, our present problems and next aim will be presented.





THEME D: HIV IN POPULATIONS

This presentation focuses on the use of respondent driven sampling (RDS) to recruit and sample two groups of migrant workers in Pakistan: those who were about to depart for the Middle East and those who had just returned from having worked there for at least 12 months and their HIV risk.

Until recently, studies that sampled hard-to-reach groups such as migrant workers traditionally used non-probability sampling methods such as snowballing or convenience sampling. That was until the development of RDS. RDS is a quasi-probability sampling method based around a structured form of snowball sampling.

The use of RDS to recruit migrant workers in Pakistan had a number of advantages: greater recruitment efficiency, unbiased sampling, minimizing costs and maximising security for the researcher and research participants. There were a couple of challenges in the implementation of RDS: social stigma attached to HIV and political instability on the time of recruitment, these issues were resolved.

RDS is recommended for other similar studies in Pakistan, but also has wider implications where it may be of use to other countries with similar socio-economic indicators and migratory issues.

East Java has a population of over 37 million and has an estimated 22,300 injecting drug users (IDUs) (2010). HIV prevalence for IDUs ranged from 56% in 2007 to 34% in 2009.

East Java has had services for IDUs since 2005 with all services were delivered by NGOs except one methadone program and one pilot program at a health centre (HC).

IDUs have been reluctant to utilize government health services because of police harassment and IDUs hadn't felt comfortable visiting public clinics as clinics didn't meet IDUs' needs.

HIV Cooperation Program for Indonesia aims to improve the range, access and quality of services for drug users in priority urban settings in East Java. Support has been given to government clinics and NGOs, with an emphasis on developing effective relationships between these 2 groups.

Health workers were anxious about providing services for drug users, particularly with regards to operating needle syringe programmes (NSP). NGOs have been unable to provide extensive clinical support or opioid substitution therapy and still distrusted government officials. Police were perceived as an impediment by service providers, and mobile distribution of needle syringes by NGOs at hotspots aimed to limit police interference.

Police leaders were approached at a national level to get their initial support for using harm reduction strategies for IDUs. Agreement was reached to provide trainings to provincial and district police officers to explain harm reduction and the needs of IDUs in order to prevent HIV, as well as the role of police in implementing this approach. A range of health personnel were involved in local police trainings. Similar technical training was also provided for health staff across East Java.

Result

14 HCs began operating services targeting drug users during 2009. All services provided NSP and 4 also provided methadone. In May 2010, 111 IDUs collected 4,706 needle syringes from HCs.

Some HCs providing methadone were rapidly inundated with referrals from NGOs. More doctors have been requested to support this program.

Police generally support these programs and their involvement in local Harm Reduction working groups increases cooperation with district level departments of health.

POSTER NUMBER:
PAPER NUMBER: 759

RESPONDENT DRIVEN SAMPLING IMPLEMENTATION IN PAKISTAN AMONG MIGRANT WORKERS: LESSONS LEARNED FROM THE FIELD

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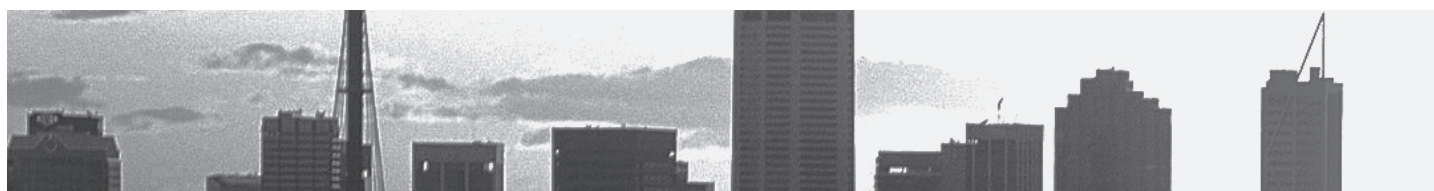
POSTER NUMBER:
PAPER NUMBER: 615

CREATING ACCESSIBLE SERVICES FOR IDUS AT COMMUNITY CLINICS IN EAST JAVA

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THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 23

CHILDHOOD SEXUAL ABUSE AS A RISK FACTOR FOR DEPRESSION IN WOMEN: PSYCHOSOCIAL AND NEUROBIOLOGICAL CORRELATES

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Depression is twice as common in women as in men, but the reason for this sexual dimorphism is unknown. This article reviews recent studies of the role of childhood sexual abuse in the subsequent development of major depressive disorder, and the biological and psychosocial mechanisms by which early stressors may contribute to adult-onset depression in women. Particular attention is paid to investigations of the long-term effects of early stress on hypothalamic-pituitary-adrenal (HPA) axis function.

Studies were identified by means of computerized and manual searches; further references were obtained from the bibliographies of reviewed articles.

Childhood sexual abuse is associated with adult-onset depression in both men and women, and occurrence of such abuse is more common in girls than in boys. There is evidence from both animal and human studies that early stressors produce long-term dysregulation of the HPA axis similar to that seen in depressed patients and that such dysregulation results in a differential response to stressors in adulthood. In addition, it appears that the HPA axis in females may be more susceptible to stress-induced dysregulation, which might contribute to an increased vulnerability to depression in adulthood.

Childhood sexual abuse is an important early stressor that may predispose individuals to adult-onset depression by means of dysregulation of the HPA axis. Investigation of the mechanisms mediating the relationship between childhood sexual abuse and adult-onset depression, and the study of gender differences in exposure to this and other stressors, may improve our understanding of the etiology of depressive illness in general.

POSTER NUMBER:
PAPER NUMBER: 72

STRENGTHENING THE HEALTH SYSTEM WHERE THERE IS LOW HIV PREVALENCE – HAS THE PROBLEM PROVIDED AN OPPORTUNITY?

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Recent work in Aceh and the Tibet Autonomous Region (TAR) of China highlights the need for tailored responses to health system strengthening in low-level HIV epidemics. Difficulties in establishing HIV prevention and treatment where there is a small caseload and few visible 'high risk groups' suggests innovative approaches are required to ensure support for an early, effective response.

In post-tsunami Aceh, investment in a comprehensive response to HIV was encouraged via government and civil society cooperation. NGO workers and members of the HIV-positive community mentored government health workers to improve the acceptability and quality of HIV testing and counseling in referral hospitals. In Tibet, government health officials were supported with management and clinical advice, while laboratories and clinics were equipped to local standards. A long-term advocacy approach was used to harness political support for effective responses to HIV supported by the enabling context of national policy. National experts rather than short-term international advisors strengthened relevant health system functions such as surveillance and outreach.

Tasking people living with HIV to mentor government counselors forged close linkages between Acehese clinicians and activists and improved testing and counseling capacity at hospitals. Employing both government and civil society representatives to conduct Aceh's first behavioral surveillance survey fostered a shared understanding of the epidemic. Evaluation findings suggest discrimination within the health system has declined as a result of collaborative activities. In Tibet, local experts were able to help prefecture laboratories reach national accreditation standards for HIV testing, develop clinical protocols for HIV and STI (syndromic) treatment and care, and conduct the first HIV/ STI prevalence survey. Training of health workers responsible for patient and community education in effective, locally appropriate approaches significantly upskilled personnel.

Responses to HIV in low prevalence settings require tailored, innovative approaches (and ideally, an enabling national HIV policy). Risk and vulnerability analyses help develop context-specific activities and can ensure labeling and stigmatization do not occur. Government and civil society responses are enhanced through joint action, and HIV specific funds can result in broad gains for the public health system.





THEME D: HIV IN POPULATIONS

According to WHO's Global Tuberculosis Control Report 2009, 3% of all new TB patients in Indonesia are HIV positive. Provincial Health Department indicates that by March 2010, there were 3,272 people with HIV and AIDS in South Sulawesi. Research has shown that someone who is HIV-positive and infected with TB is five to seven times more likely to develop active TB than someone infected with TB without HIV. Co-infection has a profound effect on emotional and social well-being of individuals and their families since they often fear disability, powerless, death, stigma and social isolation. This research explores perception of people with HIV and TB and household members about how they give emotional support to them and what kind of emotional support is needed by PLWH and TB.

The study was conducted in consultation with the coordinator of HIV care and support program in Makassar who played a pivotal role in recruiting participants in this study. Data was collected using semi-structured in-depth interviews with four PLWH and TB which included three men and one waria, and two members from each household.

The study shows that each household experiences different psychological burdens, depending on their acceptance to HIV status. It is also evident that social status may be important in accessing and providing support. A family member from lower social status household indicates that her acceptance to the existing disease affects on their support. This is based on the idea that no matter what the disease is, they need to help each other. But, there's also a different kind of support among household members. Parents support more like give advice about health status. Sisters brothers support more to keep the patient in the house not just in order to avoid shame and public scrutiny, but they also believe that this is the best way to protect the patient from stigma and social isolation. However, PLWH themselves expect to be treated normally, except if they get sick or is hospitalized. Despite the disease, they still want to have a meaningful social life.

With the increasing focus on HIV, the Pacific as many HIV focused programs targeting different sectors of the population. Most of these programs are targeting at risk population. All Pacific Island Countries identify youths as at risk population. This paper is a comparative study of the knowledge, attitude and practices of Pacific Island youths on HIV and on Risk behaviours. The study focuses on three countries namely Fiji, Kiribati and the Solomon Islands. It explores Youths safe sex practices and identified the different contributing factors to the practice.

POSTER NUMBER:
PAPER NUMBER: 550

THE IMPORTANCE OF EMOTIONAL SUPPORT: HOUSEHOLD SUPPORT AND QUALITY LIFE OF PLHIV AND TB IN MAKASSAR

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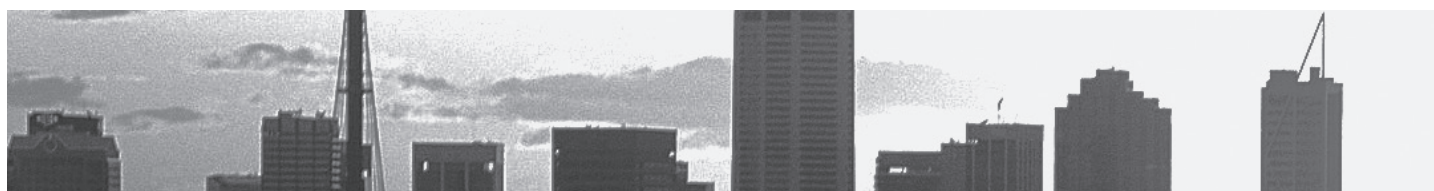
POSTER NUMBER:
PAPER NUMBER: 496

PACIFIC YOUTH AND HIV: A COMPARATIVE STUDY OF FIJI, KIRIBATI AND SOLOMON ISLAND YOUTHS

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THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 551

HIV SUPPORTED ACCOMMODATION: THE CENTRALISED INTAKE MODEL.

Roy, K.A & Cole, G

ADAHPS (AIDS Dementia & HIV Psychiatry Service) is a New South Wales based service founded in 1997 to meet the health and welfare needs of clients with HIV/AIDS related dementia and/or mental illness.

Following the establishment of the HIV Supported Accommodation Coordinator role within ADAHPS, a new referral and assessment tool has been developed. This has been adopted and utilised by both clients and their support workers seeking admission into HIV supported accommodation facilities in NSW. This process has created a centralised intake service that provides timely and appropriate service with clear referral pathways.

This is the first project of its kind nationally and it has built strong partnerships within the HIV and housing sectors. It has a strong client focussed approach which is enhanced by using a case management model of support. The NSW HIV Supported Accommodation Plan (2007-2010) provides for appropriate supported housing services, both residential and community based, to HIV positive people with a range of impairments that render them unable to live independently. Ongoing monitoring of each client's care plans are a key factor to successful tenancies.

Prior to the appointment of the HIV Supported Accommodation Coordinator, applications were made to each individual supported accommodation facility, who then made a decision about entry. The current model utilises one application form that is used for all HIV Supported Accommodation facilities. Applications for accommodation are referred to the HIV Supported Accommodation Coordinator, who assesses referred clients against the eligibility criteria and priority needs. If eligible, clients are then recommended to the housing service that best fits their needs. Due to the range of tenancies available for the different levels of support needed, many applicants have been able to move to other properties within the supported accommodation model, as their needs change.

POSTER NUMBER:
PAPER NUMBER: 705

THE DIRECTION OF HIV AND STI BIOLOGICAL RESEARCH AT THE PAPUA NEW GUINEA INSTITUTE OF MEDICAL RESEARCH

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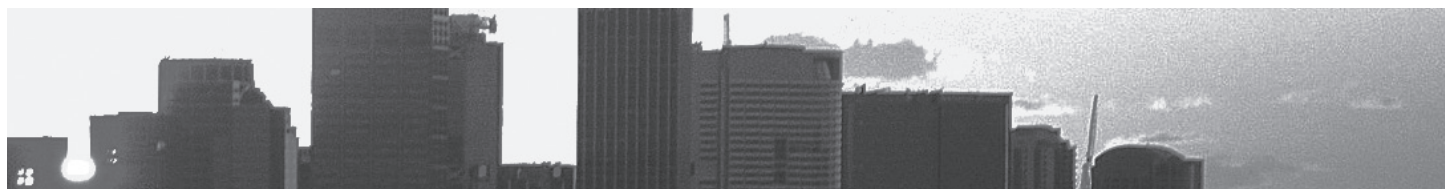
The first case of HIV in Papua New Guinea (PNG) was detected in 1987, since this time, the HIV epidemic has continued to grow and cause significant morbidity and mortality in the country. Furthermore, the burden of sexually transmitted infections (STIs) does not appear to have lessened. Whilst the number of VCCT continues to grow, and HIV testing is increasing, the biological research into the drivers of the HIV-1 epidemic remains limited.

With the exception of HIV-1 and antenatal syphilis, there are no routine specific diagnoses of sexually transmitted infections within the country. Laboratory research and diagnostic capacity in PNG is limited, and the PNG Institute of Medical Research (PNGIMR) is one of the most capable institutes within the country. Much of the research that has previously been conducted has been translated into health policy to improve the health outcomes of Papua New Guineans. In terms of HIV and STIs, research in PNG has been focused on behavioural and basic prevalence type studies.

This presentation aims to outline the direction that the HIV and STI laboratory at the PNGIMR is heading in. The laboratory is now expanding to undertake investigations into HIV and STI drug resistance, molecular epidemiology and technologies to improve the diagnosis and monitoring of HIV and other sexually STIs. This presentation will give a summary of the current projects that are being conducted.

The HIV and STI laboratory at the PNGIMR is keen to collaborate with other institutes and researchers to allow for cross disciplinary research that will answer questions in more detail than basic sero-surveillance allows. Whilst much of this research is in its infant stages, the capacity at the PNGIMR is growing, and we hope to play a major role in not only characterising the HIV and STI epidemic, but also providing data that will contribute to the control of HIV and other STIs within the country.





THEME D: HIV IN POPULATIONS

that that female IDU can be at risk of HIV due to unsafe sex in commercial sex work as well as with casual and regular sexual partners. Issues such as trust, communication, risk perceptions, and lack of power have been found to contribute to this risk. Most IDU in Indonesia are male, so little is known about HIV risk of female IDU relating to sexual behaviour. This study aimed to address this gap.

In-depth interviews were conducted with 19 females who had injected drugs in the previous 1 month and were living in central Java. Qualitative data was analysed using grounded theory. Demographic and behavioural data were also collected via a multiple-choice questionnaire for the purpose of sample description.

Mean age of FIDU was 26 years. Half the women had regular partners, most of whom were IDU, few reported that they had casual sexual partners in the previous 12 months, and reports of sex work were rare. The interviewees tended to not use a condom with regular partners. Condom use with casual partners and clients was inconsistent. Reasons given for using a condom suggested a concern for preventing pregnancy more than preventing HIV. There are same reasons for not using a condom among the three types of partner, which are discomfort, partner reluctance, feeling of safe to do sex with a person looked clean and unavailability of condom. Specific reasons of not using condom with a regular partner related to trust, inebriation, and don't want sex to be interrupted.

As found in international research, the woman in this study did not tend to use a condom with their regular partner because they trusted their partner. Concern for the feelings of the partner was also evident, whereas coercion was not, which is consistent with cultural values in Indonesia. Commercial sex was rare and casual sex was not common among the women interviewed. However, the women were not very open and might not have wanted to admit to behaviour which is strongly disapproved of in Indonesian culture.

The issue of lacking power as identified in other research was not a strong theme in the responses, although 'consideration for partner' was evident, perhaps reflecting Indonesian cultural values. Information about HIV need to be emphasised due to the improper knowledge about HIV.

The paper is a critical review of the survey methodology used during the Second Generation Surveillance (SGS) Survey conducted in 2008 in Fiji. The paper provides some insight into the methodologies used and critic on the process involved in the data collection. The involvement of some key stakeholders and their role in influencing the data collection process is a major contributing factor to the research methodological disaster discussed in the paper. Stakeholder can be instrumental in modifying the methodological approach if they have little understanding of the importance of the different research process and ethical considerations.

HIV/AIDS within prisons is often far higher than in general community, and prisons are at high risk environment for HIV/AIDS transmission. Prisoners are kept in jail for a certain period and return to society afterwards. Therefore, the infection acquired inside the prison will easily be transmitted into wider society. The rate of prisoners who died from HIV/AIDS is relatively high. In Cipinang prison, the death rate ranged from 76 in 2004 to 159 in 2005. So did in Salemba Prison, with the figure of 58 in 2004 to 179 in 2005. This study is conducted in Gunung Sari Prison in Makassar, the largest prison in South Sulawesi Province with 496 male inmates.

The aim of the study is to investigate the role of social network associated with HIV/AIDS transmission. Peer pressure, fear of social rejection and violence due to HIV/AIDS stigma, overcrowded and stressful environment inside the prison exacerbate the transmission of HIV/AIDS. Poor health facilities and inadequate health providers to overcome HIV/AIDS in prison has worsened the situation.

This study is significant in that it identifies the social factors associated with HIV/AIDS transmission among prisoners which is necessitated for the development of direction for behavioral and structural intervention in prison setting. This includes a restructuring of prison environment, including protection mechanism for the weak and vulnerable.

POSTER NUMBER:
PAPER NUMBER: 576

SEX & CONDOM USE AMONG FEMALE IDU IN CENTRAL JAVA, INDONESIA

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International research identifies

POSTER NUMBER:
PAPER NUMBER: 503

THE HIV SECOND GENERATION SURVEILLANCE SURVEY: A METHODOLOGICAL DISASTER

Kaitani M and Seniloli K

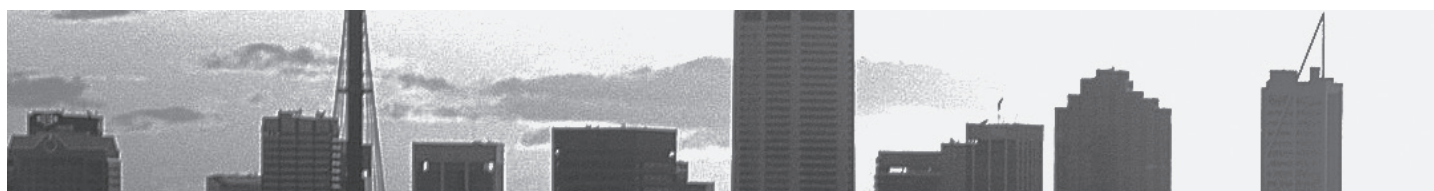
University of the South Pacific, Suva
Fiji

POSTER NUMBER:
PAPER NUMBER: 684

SOCIAL NETWORK AND HIV/AIDS TRANSMISSION: THE CASE IN GUNUNG SARI PRISON, MAKASSAR, SOUTH SULAWESI, INDONESIA.

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THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 693

COMPARISON OF EARLY AND LATE PRESENTERS AMONG HIV-POSITIVE ADULTS ATTENDING CDC/MSF HIV CLINIC, IN NANNING, CHINA

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Guangxi is the fifth poorest province and has the second highest burden of HIV infection in China. In December 2003, Médecins Sans Frontières (MSF) in collaboration with the Guangxi Center for Disease Control (CDC) opened a free HIV treatment and care project in Nanning, Guangxi Province.

All HIV-positive adult patients ever enrolled at the Guangxi CDC/MSF Clinic in Nanning were eligible for this analysis (N = 1475). Late presenters were defined as patients who presented to the clinic for the first time at WHO clinical stage 3 or 4 or who had a CD4 count of less than 200 (N = 877, 59%). Data analysis was conducted using Stata/SE version 10.0 (StataCorp LP, College Station, TX, USA). Adjusted odds ratios were calculated using logistic regression. Potential covariates investigated in the logistic regression analysis included sex, age at first visit (in decades), marital status (married or living as married versus single/separated/divorced/widowed), employment status as first visit (employed, including housewives and students, versus jobless), injection drug use (current/former versus never/not specified), and location of residence (Nanning city versus outside Nanning City).

Employment status and injecting drug use were not significantly associated with being a late presenter. Males had three times the odds (95% confidence interval 2.38 – 3.84) of being a late presenter compared to females. Being unmarried increased the odds of being a late presenter by 35% (95% confidence interval: 6-71%) compared to being married. Living outside Nanning City increased the odds of presenting late by 2.5 times (95% confidence interval: 1.98-3.30). Compared to patients between the ages of 15 to 25 years, patients between 35 to 55 years old had a significantly increased odds of presenting late.

Further studies should be undertaken to understand this high risk group and specific interventions should be implemented.

POSTER NUMBER:

THE ROLE OF ADVOCACY IN ESTABLISHING HIV PREVENTION SERVICES FOR DRUG USERS IN BANTEN, INDONESIA

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The province of Banten, formed in 2000, has a population of about 10 million and includes Tangerang on the southwest border of Jakarta with an estimated 1,800 IDUs. A further 1,500 IDUs were estimated to reside in the rest of the province in 2010. HIV was found in 40% of 80 IDUs sampled in Tangerang in 2009 although higher rates were obtained in IDUs from Jakarta and other large cities in 2007.

Despite this substantial population of IDUs at high risk of HIV transmission, no services for IDUs were operating when a joint assessment of preparedness for scaling up services was carried out in mid-2008. One NGO provided needle syringe programmes (NSP) but had lost its funding source in November 2007 and was unable to continue operating NSP from June 2008 although a support group for IDUs operated in Tangerang.

The relatively new provincial health department (Dinkes) had some experience administering a provincial bird flu program and a VCT program for those at risk of sexually transmitted HIV. Dinkes recognized the need for services for IDUs and identified a number of suitable health centres where such services could be implemented provided that they followed "normal standard procedures." Dinkes was anxious about getting local government support for implementing NSP given that the Mayor of Tangerang had been outspoken against the introduction of methadone on religious grounds.

The Deputy Governor, vice-chair of the Provincial AIDS Commission, was sought and he suggested holding a high profile community forum led by the National AIDS Commission where the harm reduction approach could be explained to local leaders and community representatives.

Extensive lobbying by Dinkes of all Banten mayors was then required to promote the introduction of NSP. Following this provincial meeting, the Mayor reversed his position on methadone and even agreed to fund the establishment of a stand-alone MMT clinic to be supervised by local health centre staff. This service was the first cost-free methadone program in Indonesia.

There are now 2 other MMT clinics operating in health centres in Banten and 3 health centres have recently implemented NSP supported of HCPI.





THEME D: HIV IN POPULATIONS

The COMPASS Project (Clinical Outreach, Men's Programs, Advocacy and Sexual Health Services Strengthening), funded by Sexual Health and Family Planning Australia (SH&FPA) and AusAID and managed by Family Planning NSW, works closely with national, provincial and district health personnel to build capacity to provide better quality STI services and extend the current range of STI treatment services in select urban and rural health and STI clinics in Morobe and East Sepik Provinces.

STI treatment health worker training consists of three core activities; (1) setting up and maintaining quality assurance (QA) systems for monitoring standards at health facilities in Morobe Province, (2) five-day clinical placements for staff from health facilities in Morobe Province to attend Friends Clinic, the major provincial STI clinic attached to the Angau Memorial General Hospital in Lae, and (3) five-day syndromic management of STI training workshops for staff from health facilities in Morobe and East Sepik Provinces.

Clinical supervision, mentoring and training for STI health centre staff is provided by the COMPASS Nurse Educator, in partnership with technical advice and support from FPNSW and the Canberra Sexual Health Centre (CSHC). COMPASS works closely with the PNG National Department of Health (NDoH) to ensure that processes and systems comply with NDoH STI treatment standards, and in partnership with the provincial health departments and Provincial AIDS Councils (PACS) in Morobe and East Sepik Provinces as well as local non-government organisations (NGOs) to ensure appropriate representation at trainings, and the transfer of skills to government accredited STI clinics and other private (NGO and church) STI clinics.

An estimated 7.1% or 1.42 million people are living with HIV infection in Kenya (KAIS 2007). Consequences are exponential particularly when more than 56% of Kenyans live below poverty line. Households that suffer from prolonged HIV/AIDS related illnesses experience decline in income because of lost income of sick adult; lost economic productivity of healthy adults who become caregivers; and dramatic increases in household expenses, especially for medical care.

Access to both credit and savings mechanisms are important for vulnerable households. Timely and flexible small loans can help vulnerable households manage their livelihoods and cope with emergencies without forcing them to sell their assets. Microfinance Institutions function on cost recovery and are under risk of loan defaults because of economic instability of HIV infected households. Conversely, savings mechanism enables vulnerable households to build assets to protect themselves against future financial crises.

Community based credits and savings groups can provide much needed services to these highly vulnerable populations at low costs, allowing participants to take small and flexible loans to protect assets, send children to school and pay for medical or funeral expenses. The members can be HIV infected households (HIV+ but productive, widows, caretakers of orphans) who make monthly contributions depending on their financial capacity. MFIs can support such groups by paying interests on savings and providing links for business literacy trainings. These groups can take loans to start their own income generation activities like investing in dairy products, kitchen garden to maintain nutrition, or some small business. The families thus not only sustain themselves for a longer period but can also spend on medical treatments.

This access to small and tailor made loans has proved beneficial in HIV infected communities as it not only meets their immediate financial requirement, it also alleviate isolation and stigma they face. Additionally, such groups are easy to target for counseling and testing services for their families, imparting knowledge on opportunistic infections, follow up on ARV, etc. This approach has been successfully implemented by SIMBA Project in Zimbabwe and INP+ in India for HIV affected communities.

POSTER NUMBER:
PAPER NUMBER: 335

HEALTH WORKER TRAINING FOR STAFF OF PROVINCIAL AND DISTRICT HEALTH SERVICES ON STI TREATMENT IN MOROBE AND EAST SEPIK PROVINCES, PNG

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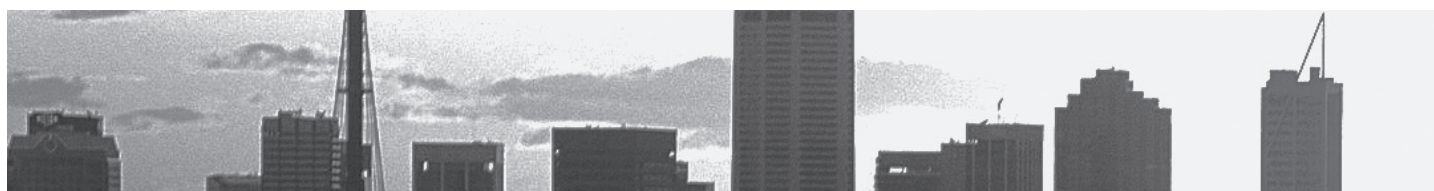
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POSTER NUMBER:
PAPER NUMBER: 416

MICRO FINANCING FOR PEOPLE LIVING WITH HIV/AIDS IN KENYA

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THEME D: HIV IN POPULATIONS

THEME D

POSTER NUMBER:
PAPER NUMBER: 562

**TIBA MASA TIBA AKAL:
HOUSEHOLD SUPPORT AND
QUALITY LIFE OF PLHIV AND TB IN
MAKASSAR**

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Indonesia

HIV/AIDS not only affects those living with HIV, but also the health and wealth of households. This is more so if a person living with HIV (PLHIV) acquires TB as an opportunistic infection. The burden faced doubles as their care and medication needs increase, and these costs impact upon household finances and the health and well-being of other family members. People living with HIV and TB co-infection often face increased fears of disability, dependence and death. They may also experience higher-levels of stigma and social isolation. Based on the perceptions and experiences of people living with HIV-TB co-infection and their household members in Indonesia, this research explores the material support available in everyday Indonesian households,

Data for this exploratory study was collected by in-depth interviews, conducted in 4 households that included 4 people living with HIV-TB co-infection (3 men and 1 waria), and 2 other members of each household (12 respondents in total). The study shows that within these households, only 1 was able to allocate a particular budget for HIV and TB medications and treatment. One of the reasons for this included importance in terms of emergencies, when there is the need for sudden hospitalization and immediate medication. It was also found that households with higher incomes were able to provide more support because they were financially able to. However, other households relied on the philosophy of 'tiba masa tiba akal', (think about the budget later when the problem occurs), or 'why care about it now', in the words of the respondents. The study also shows that, in addition to funds for treatment and medication, households tried to provide comfort and support through preparing meals that PLHIV liked best and households also used traditional medicine in addition to the pills and vitamins given by a doctor. This paper will show that the most important thing for meeting the needs and wants of PLHIV is to provide for their medication, vitamins and basic food needs, and demonstrates how different households in Indonesia attempt to meet these needs.

POSTER NUMBER:
PAPER NUMBER: 149

**ACCESS TO SERVICES AND
QUALITY OF LIFE FOR PEOPLE
RETURNING FROM DRUG
REHABILITATION CENTERS IN HO
CHI MINH CITY, VIETNAM**

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Evidence of effective approaches to address HIV risks, drug use and social stigmatization of drug users committed to government run compulsory rehabilitation centers (CRCs) in Vietnam is lacking.

In 2003, the National Assembly mandated detention of drug users in CRCs for a period of 4-5 years in Ho Chi Minh City (HCMC). At the end of 2006, as many as 15,080 residents completed their stay and were released.

Given high relapse rates and associated HIV risk following release, with the support of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), FHI and HCMC Provincial AIDS Committee developed a pilot intervention that targeted individuals transitioning from CRCs back to their communities. The project consisted of two components: 1) center-based pre-release interventions; and 2) community-based aftercare interventions.

An 820 person cohort was established in 2008. Data were collected through both qualitative and quantitative methods prior to release, and at three-month intervals post-release. A frequency analysis was conducted using SPSS.

Up to 20% of the participants reported injecting while in the center. Relapse rate reached 90% after six months of release. High rate of depression (43.81%) and suicidal thoughts (9.10%) were reported during detention. While these rates decreased upon release there was a trend for them to increase post release: levels did not reach those while detained. From 20% to 40% of the participants reported accessing condoms and needles programs one month after release but this dropped to only 3% after six months.

After six months post release, ~90% of releasee returned to regular drug use. This data further suggests that CRCs ineffective as a means of drug treatment. Further, the low utilization rate of harm reduction service is worrying and could be associated with the fear of being re-arrested and detained in CRCs.

The results can be used as a policy advocacy tool to promote better coverage of needle, condom program and methadone treatment. The study also provides evidence of the ineffectiveness of the CRCs system and can be used to advocate for replacing the centers with community-located, evidence-based drug treatment and integrated HIV prevention in Vietnam.





THEME D: HIV IN POPULATIONS

A Retrospective study was conducted to describe the demographic characteristics, clinical presentation and outcome of all HIV/AIDS patients since inception of integrated counseling and testing centre (ICTC) at Govt Medical College, Srinagar.

This study was conducted among the ICTC attendees at Govt Medical College Hospital. After pretest counseling and obtaining consent from attendees, blood samples were collected. Out of all subjects screened, 128 patients were tested positive by three rapid test methods using three different antigens.

Among 128, (87.25%) were males while 12.5% were females with male female ratio of 9.3:1. The incidence was found highest in the age group 30-39 yrs (35.9%) followed by 20-29 yrs (29.6%). Security forces formed the major group (53.1%) followed by migrant labourers (14.6%). Housewives formed 10.1% of patients. Transmission of infection was through sexual contact in majority (90.6%) followed by vertical transmission (2.3%). 78.9% of patients presented with fever of > 1 month, 33.5% with diarrhea and 35.1% with weight loss. Tuberculosis and candidiasis (3.1%) was common opportunistic infection followed by herpes zoster (1.5%) and varicella (0.78%). Six patients died during study period. Srinagar, Kashmir the largest city of state of J&K INDIA with one million population is placed as low prevalence state but it is at high risk to HIV/AIDS due to presence of security forces, tourists, religious pilgrimages, and migrant population.

Cairns in the far North of Queensland has the largest PNG community in Australia with 5.9% of Cairns population born in PNG. Because of the worrying HIV/AIDS infection in PNG and frequent travel between the two countries amongst the PNG community members, it is critical to work with PNG community in Cairns to improve the community's knowledge and understanding of HIV/AIDS and other sexual health issues.

HIV/AIDS is a taboo topic for the PNG community with lots of misunderstandings around the transmission. Shame, stigma and discrimination related to HIV are also major issues in the community. It requires encouragement and confidence to work in this area. A community health worker from PNG community has been employed to promote HIV/AIDS message through face to face workshops, information stalls at local Rusty's market, Multicultural festivals, Queen's Birthday shows and the Cairns Community Radio Station 4CCR 89.1FM, where condom packets containing different sizes were distributed to community members.

The information helped people to gain a better understanding of HIV/AIDS issues. Most people from the PNG community are concerned about their families and relatives back in Papua New Guinea and are willing to share the information when they travel back to their home country. Most importantly the messages not only help themselves but loved ones in PNG.

A true story will be told about saving a HIV positive person's life in PNG by a community member who attended a past workshop and returned back home.

POSTER NUMBER:
PAPER NUMBER: 275

CLINICAL PROFILE OF HIV/AIDS PATIENTS IN SRINAGAR, KASHMIR (INDIA).

Wani Ka, Farhana A, Kawoosa S

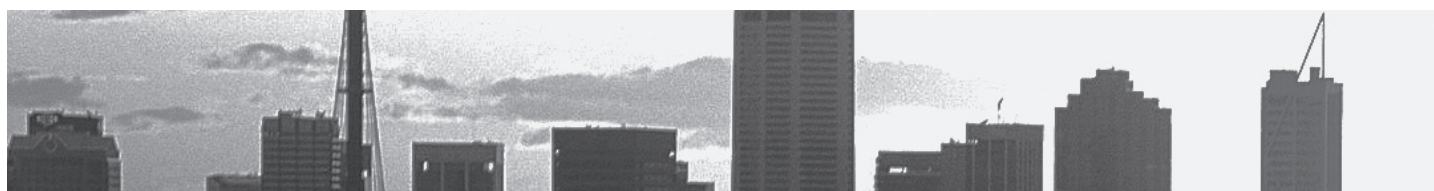
Department Of Microbiology,
Government Medical college,
Srinagar, Kashmir India.

POSTER NUMBER:
PAPER NUMBER: 228

BEYOND THE BORDER - WORKING WITH PAPUA NEW GUINEAN (PNG) COMMUNITY IN THE FAR NORTH OF QLD, CAIRNS

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THEME D: HIV IN POPULATIONS

THEME D

**POSTER NUMBER:
PAPER NUMBER: 699**

THE RELEVANCE OF RISK-REDUCTION STRATEGIES (RRS) BESIDES CONDOM REINFORCEMENT IN HIV-PREVENTION PEER EDUCATION FOR YOUNG GAY/BI/SAME-SEX ATTRACTED MEN

Wong, S¹

¹ACON, Sydney, New South Wales, Australia.

ACON's Fun & Esteem Project (F&E) is a peer education program that provides HIV prevention education to young gay, bisexual and other same-sex attracted men in Sydney. Condom use is the central and primary method for HIV prevention presented to young gay men 26 and under in the peer-led workshops.

Research has shown there are several risk reduction strategies used in conjunction with condom use by men who have sex with men (MSM) to prevent HIV infection. This presentation will explore young MSM condom reinforcement in the behavioural data with concurrent HIV-prevention messaging. Through using F&E as a part of a larger model and structure of culturally-appropriate risk reduction strategies, it will demonstrate how the delivery of interventions can be done without compromising the sexual health needs of young MSM.

analyse how condom reinforcement messages are presented in F&E workshops in the context of gay and sex-positive discussions around same-sex sexuality;
reflect on how risk reduction strategies are integrated into other peer-led conversations around safe sex;
present the ways that young men who go through F&E and interrogate HIV prevention messages in the context of their lived sexual experiences; and
look to see how these interrogations can lead to a more structured and cohesive conversation around risk reduction in existing workshop materials.

**POSTER NUMBER:
PAPER NUMBER: 311**

MEN WHO HAVE SEX WITH MEN AND TRANSGENDER IN THE PACIFIC: WHAT DO WE KNOW ABOUT THEIR HIV RISK?

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There is a claim that we know little about sex between men and transgender in the Pacific, including HIV prevalence, HIV risk, knowledge and the meanings these groups give to their sexual practices. However, if we dig deep enough we know a considerable amount about sex between men and transgender even though there is considerable silence and denial.

Traditionally, there was cultural tolerance of sex between men and transgender identities in the Pacific, where transgender had an accepted place in many islands, although this changed with colonisation. However, even today Western constructs of homosexuality and gay identity do not fit comfortably with Pacific cultures and many research tools that examine HIV risk amongst MSM and transgender in the Pacific are problematic because they do not allow for the richness and diversity of sexual expression in those cultures.

In this paper I will discuss what we do know about sex between men and transgender in the Pacific and importantly what we do NOT know and why. I will also discuss whether or not sex between men and transgender is a driver of HIV in the Pacific. At the end of the paper I will argue for better research that allows us to not only identify but also understand risk among this group.

**POSTER NUMBER:
PAPER NUMBER: 738**

CORRELATES OF STI AND HIV KNOWLEDGE AMONG YOUNG ABORIGINAL AUSTRALIANS

Worth H

Department of Public Health &
Community Medicine Australia

This paper examines knowledge of HIV, STIs and BBVs in a sample of Aboriginal young people in NSW aged 16-30 years. Cross-sectional data were collected from 293 Aboriginal people attending two Aboriginal cultural events in NSW. Data were collected using hand held computer devices, where questions were read to the participant via headphones, and answers recorded on a handset.

Significant correlates of higher scores on HIV knowledge were being younger, having higher levels of education, and believing that the best place to get help for an STI was an AMS. Respondents with better STI knowledge were more likely to be women, have achieved a higher level of education, had not been in prison recently, and reported believing that an AMS was the best place to seek help for an STI. Young Aboriginal people in this study have reasonable levels of STI and HIV knowledge in some areas but poor knowledge in others. On the whole knowledge about STI transmission was better than about HIV with the notable exception of needle-sharing. However, there was considerable confusion about whether or not condoms could protect you from all STIs. Only half of our participants correctly answered that you could not get HIV from sharing a bong, while close to a third either did not know or thought that you could get HIV from kissing.





THEME D: HIV IN POPULATIONS

Of the 130 million migrant workers in Chinese cities, 30% are women, and majority of these women are in their fertile age. Previous research indicates that these female migrants are found in a particularly vulnerable position in the background of transmission of AIDs from high risk population to general population. At the same time, most of these women have never received any sex education and have no knowledge about transmission and prevention of STIs (including AIDs). Therefore, AIDs prevention and intervention targeting this population group are important. Based on analysis of 11 projects on AIDs prevention among female migrants in 9 Chinese cities, this paper argues that AIDs prevention and intervention measures targeting specific population groups need to take full consideration of their socio-cultural attributes (age, gender, occupational group, residence, social relation, and etc.). Programs created in accordance with socio-cultural attributes brings significant results in improving female migrants' awareness of risk and knowledge about STIs, in reducing risky behaviors, and in forming peer groups of mutual information of knowledge sharing. Specifically, this paper emphasizes social relation network as one of important factors that cannot be overlooked in making AIDs prevention and intervention efforts.

POSTER NUMBER:
PAPER NUMBER: 421

AIDS PREVENTION AMONG CHINA URBAN FEMALE MIGRANT POPULATION: A SOCIO-CULTURAL PERSPECTIVE

Zhong Y

Department of Sociology, Tsinghua
University, Beijing, China

THEME D



ashm

Australasian HIV/AIDS Conference 2010

22nd Annual Conference of the Australasian Society for HIV Medicine
Sydney, 20-22 October 2010

Wednesday 20 - Friday 22 October 2010
Sydney Convention and Exhibition Centre, Darling Harbour, Sydney

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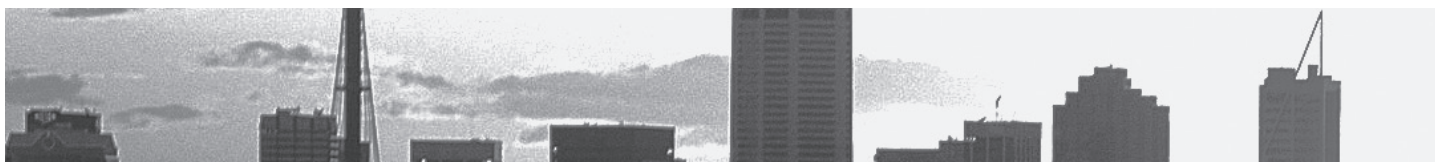
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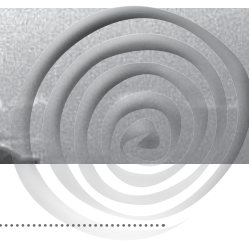


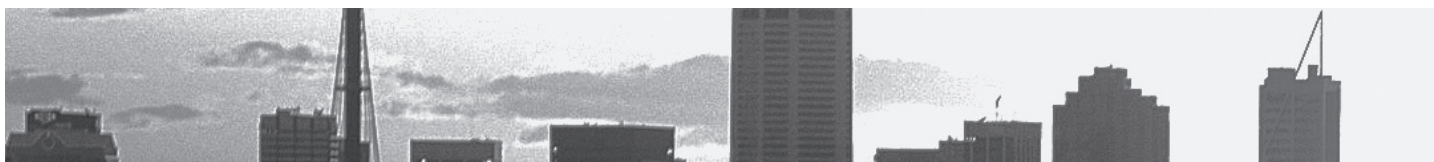


NOTES

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